2003 & 2004 Medium Duty C Series Electrical

Overview

ORGANIZATION

The Electrical section of the 2003 & 2004 Medium Duty C Series Body Builder Manual is not split between Family 2 and Family 3 trucks. The Electrical systems are common between the families. Any family specific requirements are called out in the attached documentation. This document is organized as follows:

- Systems Operation – How it works.
- Component Locator – Where it is.
- Connectors & Pinouts – What it looks like, and finally,
- Subsystem Schematics – Detailed wiring and electrical schematic information.

WHAT'S NEW FOR THE MEDIUM DUTY C SERIES

- A Component Locator page has been included to show the location of major electronic modules on the truck.
- Upfitter Provision Subsystem – A dedicated Connector is provided for PTO applications requiring additional equipment installed by the Upfitter.
- Body Builder Connector – A 128k - Pulse Per Mile speed signal has been added for easy interface to equipment requiring this information.
- Detailed System Operation Instructions are provided for the Fast Idle (UF3) and Power Take Off (PTO) options. Note: These instructions assume the option has been ordered with the vehicle and are not retrofit procedures.
- Connector Detail and Location Illustrations are provided for many interfaces. Terminal, Cable Seal, and mating connector information have been added where appropriate.
- Detailed Electrical schematics are provided for many subsystems.
- New LLY 6.6L and LG4 7.8L engine information is added for diesel engines sold after 1/01/2004. (See LLY and LG4 ECM Connectors and Location Drawings.) The new engines require new Engine Control Modules. The LLY ECM changes from a 2-way (on the LB7 ECM) to a 3-way connector, and the new LG4 ECM from a 5-way to a 2-way connector. Revised schematics are included for Power and Ground Distribution, PTO Upfitter, Engine, and Transmission Controls.
- New subsystem schematics have been added for subsystems affected by the new Diesel engines. These subsystems include: Fuel, Heated Fuel/Water in Fuel, Exhaust Brake/Restrictor, Starting & Charging, Cruise Control, Batteries, 2-speed Axle, Serial data, and HVAC.

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2003 & 2004 Medium Duty C Series Electrical

(Overview — continued from previous page)

SPECIAL INTEREST TO UPFITTERS

Connectors have been provided to allow easy interface for upfitter equipment rather than splicing into existing harnesses. These subsystems and connectors include:

- Upfitter Provision – PTO related functions
- Trailer Wiring – Class two and three vehicles
- Body Builder Connector – exterior lighting and signaling, power, and VSS
- A Ground Block located next to the Body Builder Connector for easy ground termination

Navigation

The Table of Contents and Index items are linked to the actual page. Click on the item of interest and you'll go to the corresponding page. You can return with the "previous page" arrow in the upper center of the screen. Other links embedded in the document are hi-lighted in blue.

Viewing

The size (%) control is located in the lower left corner of the screen. Click the down arrow and select "fit in window" (62%) or "actual size" (100%) for most viewing applications. You can zoom in schematic detail by selecting a larger percentage.

Printing

Specific pages can be printed out. Be careful to select a print range or "current page" or all 317 pages will try to print out.

Information provided is believed to be accurate at the time of publication. GM reserves the right to change the information at any time.

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(LG4-'04i) 7.8L-Diesel/Duramax D-17
(LG5) 7.2L-Diesel/CAT D-26
(LB7) 6.6L-Diesel/Duramax D-34
(LLY) 6.6L-Diesel/Duramax D-42

Ground Distribution

(L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax D-51
(L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax D-63
(LG4-'03-'04) 7.8L-Diesel/Duramax D-75
(LG4-'04i) 7.8L-Diesel/Duramax D-87
(LG5) 7.2L-Diesel/CAT D-100

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System Operating Instructions

UF3 – Fast Idle Option – Electrical Requirements

OUTLINE

- Overview
- Engine/Transmission Variations
- Factory Installed Equipment
- Upfitter Installed Equipment
- Operation
- Appendix
    - Reprogramming the PCM / Using the Tech 2 Scan Tool – (Attachment 1)
    - Illustrations
        - IP Switch Panel (Figure 1)
        - Fast Idle Switch (Figure 2)

OVERVIEW

The UF3 fast idle option allows the operator to push a switch and raise the engine speed to a predetermined Idle RPM value. This feature can only be used when the vehicle is stationary. Examples of Fast Idle applications are battery charging, idle operation of High Electrical Load vehicles, quick warm ups, and improved AC performance.

Scope

The GM (UF3) option described here is the necessary electrical and electronic content to control the engine idle speed. This is not a description of how to install these features if not ordered as part of the option. Base factory settings and procedures to change the factory settings are described here. Responsibility for proper and safe operation for any additional equipment remains with the Upfitter.

(PTO) vs. (UF3) Fast Idle

The (PTO) option allows for increased engine speed operation for increased power output to the PTO unit. The (UF3) fast idle option also allows for increased engine speed but is used for quick warm up, A/C performance, or battery charging. The (PTO) Power Take Off and (UF3) fast idle options are mutually exclusive on the same vehicle with the L18/LB7/LG4 engines.

ENGINE/TRANSMISSION VARIATIONS

The 2003 Medium Duty C Series uses 4 engines as shown below:

Engine	Description	Truck Family Available
L18	8.1 L Gas	2 & 3
LB7	Duramax 6600 Diesel	2
LG4	Duramax 7.8L Diesel	3
LG5	Caterpillar 7.2L Diesel	3

FACTORY INSTALLED EQUIPMENT

The UF3 fast idle option includes the Fast Idle Switch, the Fast Idle Indicator Lamp and necessary wiring to the ECM for operation.

- Fast Idle Switch - Use to increase Engine speed to a preset value.
- Fast Idle Indicator Lamp – ECM turns on light to indicate operation in the Fast Idle Mode. This indicator is in the switch.

UPFITTER INSTALLED EQUIPMENT

No upfitter installed equipment is required to operate the function. Responsibility for proper and safe operation for any additional equipment remains with the Upfitter.

OPERATION

Description

Vehicles ordered with the **UF3 (Fast Idle)** option come with a dash mounted switch which allows the user to increase the engine idle speed to a fixed value. The Fast Idle Switch is located to the right of the steering wheel as shown in the illustration (Figure 1). An indicator in the switch lights to show Fast Idle mode is active.

How To Operate

To enable the Fast Idle, the following conditions must be met:

1. Engine must be running
2. Transmission must be in Park or Neutral
3. Vehicle speed must be less than 5 mph
4. Brake or Clutch must not be depressed.

When the above conditions are met, the operator can activate the Fast Idle mode by pressing the Fast Idle Switch. If the switch is pressed while the engine is in the Fast Idle mode, the engine will return to normal base idle.

Engine Calibrations

The factory preset and minimum and maximum programmable speeds are shown in the table below for the **L18/LB7/LG4 engines:**

PROGRAMMABLE PARAMETERS	DEFAULT SETTINGS (RPM)	MINIMUM VALUE (RPM)	MAXIMUM VALUE (RPM)	ADJUSTMENT RESOLUTION (RPM)
Maximum Fast Idle Speed *Accelerator Disables Fast Idle*	2500	1000 *Can't be set below base Fast Idle Speed Parameters*	3800	25
Base Idle Speed	1200	600 *Normal engine idle will override if higher than Fast Idle.*	1300 *Cannot be set above the maximum Fast Idle Speed Parameter*	25

Note: The Values shown in the above chart are accurate at the time of publication but may change in time for various reasons including running changes made to the ECM, Calibrations, Tech 2 programming, software. Etc.

Caterpillar LG5 Engine

Base Fast Idle is set at the Factory to **1000 RPM**. Fast Idle can be programmed from **700 to 2640 RPM.**

Adjusting the Factory Preset Engine Speed

The Above parameters can be reprogrammed with a GM Tech 2 Diagnostic scan tool for the L18/LB7/LG4 engines. The Tech 2 connects to the Data Link Connector under the dash. Information regarding reprogramming with the Tech 2 tool can be found in the Appendix (Attachment 1). Reprogramming the LG5 engine requires a Caterpillar electronic service tool.

APPENDIX

Reprogramming the PCM / Using the Tech 2 Scan Tool
Attachment 1

Illustrations
Location of Fast Idle Switch and Indicator – (Figure 1)
Switch Detail – (Figure 2)

System Operating Instructions

PTO – Power Take Off Option – Electrical Requirements

OUTLINE

- Overview
- Engine/Transmission Variations
- Vocation/Modes
- Factory Installed Equipment
- Upfitter Installed Equipment
- Operation *
  - Stationary Preset Mode
  - Stationary Variable Mode
  - Mobile Variable Mode
  - PTO Engine Shutdown
  - Remote Operation
- Appendix
  - Reprogramming the PCM / Using the Tech 2 Scan Tool – (Attachment 1)
  - Illustrations
    - Location of PTO Switch and Indicator – (Figure 1)
    - PTO Switch Detail – (Figure 3)

Note: *Caterpillar has different programming capability. See your dealer for more information.

OVERVIEW

A Power Take Off (PTO) is a gearbox or mechanical device used to transmit mechanical power from the powertrain, through gears or a transmission, to another mechanical or hydraulic device. Examples of PTO applications are: salt spreaders, refuse equipment, plows, pumps, drills, lifts, wrecker equipment, dump bodies, fire/rescue equipment, etc.

PTO Advantages

- PTO's are inexpensive, convenient, safe and reliable.
- PTO's bolt on to the transmission, engine, transfer case or can be incorporated into the accessory belt drive system.
- PTO's eliminate the need for a complex array of levers, controllers, electric motors, etc., which would be required to duplicate the operation of a PTO.

Scope

The PTO unit itself is installed by the Upfitter or Specialty Vehicle Assembler on the vehicle. The GM (PTO) option described here is the necessary electrical and electronic content to control the PTO unit. Responsibility for proper and safe operation remains with the Upfitter. Other PTO related RPO's such as V66 (mechanical provisions for Front PTO) are not addressed here.

(PTO) vs. (UF3) Fast Idle

The (PTO) option allows for increased engine speed operation for increased power output to the PTO unit. The (UF3) fast idle option also allows for increased engine speed but is used for quick warm up, A/C performance, or battery charging. The (PTO) Power Take Off and (UF3) fast idle options are mutually exclusive on the same vehicle with the L18/LB7/LG4 engines.

ENGINE/TRANSMISSION VARIATIONS

The 2003 Medium Duty C Series uses 4 engines as shown below:

Engine	Description	Truck Family Available
L18	8.1 L Gas	2 & 3
LB7	Duramax 6600 Diesel	2
LG4	Duramax 7.8L Diesel	3
LG5	Caterpillar 7.2L Diesel	3

Many transmissions are available on the 2003 Medium Duty C Series. 13 manual and six automatics are available on Family 3 trucks alone. The Caterpillar engine and some Allison transmissions have dedicated PTO connectors that interface with their control modules. The Engine Controller and Transmission Controller communicate with each other on a high-speed serial data link. The PTO functions are interfaced to the ECM on 2003 Medium Duty C Series to reduce variation in wiring and function. The LG5 Caterpillar engine requires different PTO wiring from the other engine applications but functions in a similar manner. Specific wiring is supplied with the PTO option.

VOCATION/MODES

The primary difference in PTO operation is whether the vehicle is stationary or moving. Stationary operation can have either preset or variable PTO speeds. Some examples of modes and vocations are:

- Stationary Preset – Three preset high idle speeds – Refuse & Wrecker equipment, Fire truck pumpers,
- Stationary Variable – Variable high idle speeds - Drills, Lifts,
- Mobile Variable – Allows variable PTO speeds while the vehicle is moving – Salt Spreaders, Plows, Street Cleaners.

Note: The ECM can be programmed to only one of these modes at any given time. Caterpillar has different programming capability. See your dealer for more information.

FACTORY INSTALLED EQUIPMENT

The PTO option includes the PTO Enable Switch, PTO Relay, K34 Cruise Control Switch, Upfitter Connector to allow optional Upfitter installed switches, and necessary wiring.

- PTO Enable Switch – Located on Dash
- PTO Relay – Turned on by ECM, Provides power for Engage Switch and Load Solenoid.
- K34 Cruise Control Switch – Steering column mounted - use to adjust idle speeds under PTO operation.
- Upfitter Connector – allows interconnection of optional Upfitter installed switches.

UPFITTER INSTALLED EQUIPMENT

Optional Upfitter installed equipment includes Remote PTO Up / Down Switches, PTO Load Engage Switch, PTO Load Solenoid, and Remote Kill Switch. All of these devices interface with the Upfitter Connector.

- Remote PTO Up / Down Switches – Same function as Cruise Control Switches, allows operation outside of Cab for Stationary PTO applications.
- PTO Load Engage Switch – Allows for positive action feedback to ECM for before idle speed is increased. A 5 sec (calibrated) delay occurs without this feedback.

  Note: The Caterpillar ECM does not provide a feedback for PTO operation.
- PTO Load Solenoid – Causes PTO engagement if so equipped.
- Remote Kill Switch – This Normally Closed Switch allows the operator to stop the engine for remote Applications.

OPERATION

Description

The PTO RPO is an option that allows the user to raise the engine speed through the use of designated switches and ECM programming. The ECM can be programmed to one of the following three PTO modes:

- **Stationary Preset mode** – Three preset high idle speeds. Vehicle must be stationary.
- **Stationary Variable mode** – Variable high idle speeds. Vehicle must be stationary.
- **Mobile Variable mode** – Allows variable PTO speeds while vehicle is moving.

These PTO modes are addressed separately and in detail in the following pages.
Please note the ECM can be programmed to only one of the three modes at any one time.

PTO Switches

Vehicles ordered with the **PTO** option come with a IP mounted switch which allows the user to enable the function. The PTO Switch is located to the right of the steering wheel as shown in the illustration (Figure 1 & Figure 3). An indicator in the switch lights to show PTO mode is active. The engine speed can then be changed with either the cruise control switches or upfitter installed remote PTO switches. Cruise Control Switches come with the PTO option on the 2003 Medium Duty C Series. The following chart shows how the switches operate.

	PTO SWITCH CONVERSION CHART	
PTO w/Cruise Switch Operation	**Remote PTO Switch Operation**	**Function**
Cruise On/Off	N/A	Cruise Switch Enable
PTO Enable	N/A	PTO Enable
SET	PTO Down	Lower RPM
RES	PTO Up	Raise RPM

Stationary Preset Mode

Description

The Stationary Preset Mode allows the user to select from three high idle speeds which are programmed in the ECM. The user can toggle between three preset speeds using the SET or RES switches or the Remote PTO Switches.

How To Operate

Prior to enabling the Stationary PTO Mode, the following conditions must be met:

1. Engine must be running.
2. Transmission must be in Park or Neutral.
3. Vehicle speed must be less than 5 mph.
4. Brake or Clutch must not be depressed.

When the above conditions are met, the operator can activate the Stationary PTO by the following sequence:

1. Set the Park Brake.
2. Set the Cruise On/Off Switch to the On position – L18 only.
3. Set PTO Enable Switch to On position.

Upon Completion of the above steps, the PTO Stationary Preset Mode will be enabled and the engine speed will increase to the PTO Base Idle Speed. Toggling the SET and RESume switches will cause the engine RPM to change from normal to either the PTO Preset #1 or PTO Preset #2 speed depending on which switch is pressed first.

Note: LB7/LG4 – ECM enables PTO relay with switch activation. Once on, the ECM won't turn the relay off until the switch is turned off.

Any changes in the above conditions, including depressing the brake or clutch pedals or shifting an automatic transmission in gear, will disable the Stationary Preset Mode causing the engine to return to normal base idle.

Note: L18 - Using the Accelerator to raise the engine above the Maximum Fast Idle Speed will result in disabling the PTO Stationary Preset Mode.
LB7/LG4 – Engine will be governed to PTO Max engine speed with throttle activation. Engine speed will return to pre-activation value after the pedal is released.

Engine Calibrations

The factory preset and minimum and maximum programmable speeds are shown in the table below for the **L18/LB7/LG4 engines:**

PROGRAMMABLE PARAMETERS	DEFAULT SETTINGS (RPM)	MINIMUM VALUE (RPM)	MAXIMUM VALUE (RPM)	ADJUSTMENT RESOLUTION (RPM)
Maximum Fast Idle Speed *Accelerator Disables Fast Idle*	2500 – *L18* 2200 – *LB7/LG4*	1000 *Can't be set below base Fast Idle Speed Parameters*	3800 – *L18* 2200 – *LB7/LG4*	50
PTO Base Idle Speed	1200 – *L18* 850 – *LB7* 1000 – *LG4*	600 *Normal engine idle will override if higher than Fast Idle.*	1300 – *L18* 1400 – *LB7/LG4* *Cannot be set above the maximum Fast Idle Speed Parameter*	50
PTO Preset #1	1200 – *L18* 1250 – *LB7* 1400 – *LG4*	1000 *Can't be set below base Fast Idle Speed Parameters*	Maximum Fast Idle Speed	50
PTO Preset #2	1800 – *L18 1700* 1700 – *LB7/LG4*	1000 *Can't be set below base Fast Idle Speed Parameters*	Maximum Fast Idle Speed	50
PTO Relay Engage Max Engine Speed	1000 – *LB7/LB4*	600	Maximum Fast Idle Speed	50

Note: The Values shown in the above chart are accurate at the time of publication but may change in time for various reasons including running changes made to the ECM, Calibrations, Tech 2 programming, software. Etc.

Caterpillar LG5 Engine

PTO Engine RPM Set Speed is factory set at 1200 rpm. PTO Engine RPM Set Speed can be programmed between 700 and 2640 rpm.

Adjusting the Factory Preset Engine Speed

The Above parameters can be reprogrammed with a GM Tech 2 Diagnostic scan tool for the L18/LB7/LG4 engines. The Tech 2 connects to the Data Link Connector under the dash. Information regarding reprogramming with the Tech 2 tool can be found in the Appendix (Attachment 1). Reprogramming the LG5 engine requires a Caterpillar electronic service tool.

Stationary Variable Mode

Description

The Stationary Variable Mode allows the user to retain the engine speed at a desired value through the use of the accelerator pedal and the SET or RES switch. The engine speed must be greater than the PTO Base Fast Idle Speed and lower than the Maximum Fast Idle Speed.

How To Operate

Prior to enabling the Stationary Variable PTO Mode, the following conditions must be met:

1. Engine must be running
2. Transmission must be in Park or Neutral
3. Vehicle speed must be less than 5 mph
4. Brake or Clutch must not be depressed.

When the above conditions are met, the operator can activate the Stationary Variable PTO by the following sequence:

1. Set the Park Brake.
2. Set the Cruise On/Off Switch to the On position – L18 only.
3. Set PTO Enable Switch to On position.
4. Depress the Accelerator pedal to obtain the desired high idle speed.
5. Press the SET button to hold engine at the desired high idle speed.

The SET and RES switches can then be used to adjust the engine speed within the Maximum and Minimum RPM values shown in the Engine calibration table (Table A). The adjustment increments are 25 RPM (L18/LG4), 100 RPM (LG7). This function with the remote switches as well as the cruise control switches.

PTO – STATIONARY VARIABLE MODE FUNCTION CHART		
SWITCH	**SET**	**RES**
PRESSING ONCE	Engine speed will decrease by **25 RPM** (L18/LG4), **100 RPM** (LB7) decrements and will maintain the new engine speed value. Engine speed can be decreased down to the engine base idle speed value. If engine speed is at this value, all SET inputs will be ignored.	Engine speed will increase by **25 RPM** (L18/LG4), **100 RPM** (LB7) increments and will maintain the new engine speed value. Engine speed can increase up to the maximum fast idle speed value. If engine speed is at this value, all RES inputs will be ignored.
HELD	Decelerates engine down to the engine base idle speed value.	Increases engine speed up to the maximum fast idle speed value.

Note: If the Stationary Variable Mode is disabled (i.e., brake depressed), it may be re-enabled by pressing the RES switch. This will cause the engine to resume the speed it was prior to disabling.

TABLE "A" — *Engine Calibrations*

The factory preset and minimum and maximum programmable speeds are shown in the table below for the **L18/LB7/LG4 engines:**

PROGRAMMABLE PARAMETERS	DEFAULT SETTINGS (RPM)	MINIMUM VALUE (RPM)	MAXIMUM VALUE (RPM)	ADJUSTMENT RESOLUTION (RPM)
Maximum Fast Idle Speed *Accelerator Disables Fast Idle*	2500 – *L18* 2200 – *LB7/LG4*	1000 *Can't be set below base Fast Idle Speed Parameters*	3800 – *L18* 2200 – *LB7/LG4*	25 – *L18/L64* 100 – *LB7*
PTO Base Idle Speed	1200 – *L18* 850 – *LB7* 1000 – *LG4*	600 *Normal engine idle will override if higher than Fast Idle.*	1300 – *L18* 1400 – *LB7/LG4* *Cannot be set above the maximum Fast Idle Speed Parameter*	25 – *L18/L64* 100 – *LB7*
PTO Relay Engage Max Engine Speed	1000 – *LB7/LB4*	600	Maximum Fast Idle Speed	50

Note: The Values shown in the above chart are accurate at the time of publication but may change in time for various reasons including running changes made to the ECM, Calibrations, Tech 2 programming, software. Etc.

Caterpillar LG5 Engine

PTO Engine RPM Set Speed is factory set at 1200 rpm. PTO Engine RPM Set Speed can be programmed between 700 and 2640 rpm. The PTO bump rate is 50 RPM.

Adjusting the Factory Preset Engine Speed

The Above parameters can be reprogrammed with a GM Tech 2 Diagnostic scan tool for the L18/LB7/LG4 engines. The Tech 2 connects to the Data Link Connector under the dash. Information regarding reprogramming with the Tech 2 tool can be found in the Appendix (Attachment 1). Reprogramming the LG5 engine requires a Caterpillar electronic service tool.

Any changes in the above conditions, including depressing the brake or clutch pedals or shifting an automatic transmission in gear, will disable the Stationary Variable Preset Mode causing the engine to return to normal base idle. Using the Accelerator to raise the engine above the Maximum Fast Idle Speed will result in disabling the PTO Stationary Variable Mode.

Mobile Variable Mode

Description

The PTO Mobile Mode allows the driver to maintain a desired engine speed (not vehicle speed) while the vehicle is moving. This feature is available with both manual and automatic transmissions. The engine speed must be greater than the PTO Base Fast Idle Speed and lower than the Maximum Fast Idle Speed. The Vehicle speed must be between the Minimum and Maximum Vehicle Speed Values.

How To Operate

To engage the PTO Mobile Variable Mode, the following conditions must be met in the following order:

1. Engine must be running
2. Transmission must be in gear.
3. Vehicle speed must be between the Minimum and Maximum Vehicle Speeds
4. Brake or Clutch must not be depressed.
5. PTO Enable Switch must be set to the On position

When the above conditions are met, the operator can activate the Mobile Variable mode by the following sequence:

7. Depress the Accelerator Pedal to obtain the desired engine speed.
8. Press the SET button to hold engine at the desired high idle speed.

The SET and RES switches can then be used to adjust the engine speed within the Maximum and Minimum RPM values shown in the Engine calibration table (Table B). The adjustment increments are 25 RPM (L18/LG4), 100 RPM (LG7).

PTO – MOBILE VARIABLE MODE FUNCTION CHART		
SWITCH	**SET**	**RES**
PRESSING ONCE	Engine speed will decrease by **25 RPM** (L18/LG4), **100 RPM** (LB7) decrements and will maintain the new engine speed value. Engine speed can be decreased down to the engine base idle speed value. If engine speed is at this value, all SET inputs will be ignored. If the vehicle reaches the Minimum Vehicle Speed Value, PTO mode will be disengaged.	Engine speed will increase by **25 RPM** (L18/LG4), **100 RPM** (LB7) increments and will maintain the new engine speed value. Engine speed can increase up to the maximum fast idle speed value. If engine speed is at this value, all RES inputs will be ignored. If the vehicle reaches the Maximum Vehicle Speed Value, PTO mode will be disengaged.
HELD	Decelerates engine down to the engine base idle speed. If the vehicle reaches the Minimum Vehicle Speed Value, PTO mode will be disengaged.	Increases engine speed up to the maximum fast idle speed value. If the vehicle reaches the Maximum Vehicle Speed Value, PTO mode will be disengaged.

Note: If the Stationary Variable Mode is disabled (i.e., brake depressed), it may be re-enabled by pressing the RES switch. This will cause the engine to resume the speed it was prior to disabling.

TABLE "B" — *Engine Calibrations*

The factory preset and minimum and maximum programmable speeds are shown in the table below for the **L18/LB7/LG4 engines:**

PROGRAMMABLE PARAMETERS	DEFAULT SETTINGS (RPM)	MINIMUM VALUE (RPM)	MAXIMUM VALUE (RPM)	ADJUSTMENT RESOLUTION (RPM)
Maximum Fast Idle Speed *Accelerator Disables Fast Idle*	2500 – *L18* 2200 – *LB7/LG4*	1000 *Can't be set below base Fast Idle Speed Parameters*	3800 – *L18* 2200 – *LB7/LG4*	25 – *L18/L64* 100 – *LB7*
PTO Base Idle Speed	1200 – *L18* 1000 – *LB7/LG4*	600 *Normal engine idle will override if higher than Fast Idle.*	1300 – *L18* 1400 – *LB7/LG4* *Cannot be set above the maximum Fast Idle Speed Parameter*	25 – *L18/L64* 100 – *LB7*
Maximum Vehicle Speed Governing MPH	**20** – *L18* **80** – *LB7* **75** – *LG4*	3 MPH	**30** – *L18* **80** – *LB7* **255** – *LG4*	1
PTO Relay Engage Max Engine Speed	1000 – *LB7/LB4*	600	Maximum Fast Idle Speed	50

Note: The Values shown in the above chart are accurate at the time of publication but may change in time for various reasons including running changes made to the ECM, Calibrations, Tech 2 programming, software. Etc.

Caterpillar LG5 Engine

PTO Engine RPM Set Speed is factory set at 1200 rpm. PTO Engine RPM Set Speed can be programmed between 700 and 2640 rpm. The PTO bump rate is 50 RPM.

Adjusting the Factory Preset Engine Speed

The Above parameters can be reprogrammed with a GM Tech 2 Diagnostic scan tool for the L18/LB7/LG4 engines. The Tech 2 connects to the Data Link Connector under the dash. Information regarding reprogramming with the Tech 2 tool can be found in the Appendix (Attachment 1). Reprogramming the LG5 engine requires a Caterpillar electronic service tool.

PTO Engine Shutdown

Description

The PTO option includes provisions for PTO engine fault shutdown. This feature allows the operator to stop the engine while in PTO mode with an aftermarket installed switch. **If the truck is not in PTO mode, pressing the switch will have no effect on engine operation.** The PTO Upfitter Connector (located on the right side of the engine compartment near the right wheel) Component legend has been provided for installation of remote PTO controls. The upfitter can access the PTO engine fault shutdown circuits through this connector. The upfitter must provide the mating connector, wiring, and remoter switches shown on the Upfitter (PTO) Connector. To install this feature see the upfitter provisions schematics. Important. **If the PTO engine shutdown feature is to be used, it must be turned on in the ECM. If this feature is not turned on it will have no effect on the engine.**

The Above parameters can be reprogrammed with a GM Tech 2 Diagnostic scan tool for the L18/LB7/LG4 engines. The Tech 2 connects to the Data Link Connector under the dash. Information regarding reprogramming with the Tech 2 tool can be found in the Appendix (Attachment 1). Reprogramming the LG5 engine requires a Caterpillar tool or see your Caterpillar Dealer.

Remote Operation

Description

The PTO Upfitter Connector (located on the right side of the engine compartment near the right wheel) Component legend has been provided for installation of remote PTO idle controls. The upfitter can access the PTO high idle circuits through this connector. The upfitter must provide the mating connector, wiring, and remoter switches shown on the Upfitter (PTO) Connector. Two momentary switched are required to duplicate the operation of the SET and RESume switches in the cab. The schematics showing the switches can be found on the Subsystem Electrical schematics under Upfitter Provisions. PTO UP switches duplicate the RES switch operation and the PTO Down switch duplicates the SET switch operation. **Please note that the PTO high idle must still be enabled from the Cruise On/Off and the PTO enable switches in the cab.**

Separating Stop from Turn Signal Lamps (Amber Turn/Hazard Lamps)

The 2003 Medium Duty C trucks have single red tail lamp assemblies that function as stop/turn/hazard lamps. Many applications call for separating the brake lamps from the Turn/Hazard function or adding additional Amber Turn / Hazard lamps.

The procedure for implementing Amber Turn /Hazard Lamps is outlined below.

1. Remove the CHMSL ISO relay (Page B6) to eliminate the brake function from the existing lights. Signaling lamps have only the turn/hazard flasher capability. There are no stop lights on the vehicle when the Relay is removed.
2. Stop lights must be added back by wiring to the 1320 (Stop) circuit in the Body Builder or Bus Connectors (Page C1 & Page C3). Existing Rear Tail Lamp assemblies may be utilized by directly wiring to them. See Exterior Lighting Subsystem Electrical Schematic (Page D237).
3. Additional Turn lamps can be wired to 318 (Left Turn) and the 319 (Right Turn) circuits in the Body Builder or Bus Connector.

It is the responsibility of the upfitter to meet all FMVSS lighting requirements. The upfitter must also ensure that the combined current of any additional lighting does not exceed the circuit fusing.

Note: This procedure eliminates the Brake Lamp function at the 7-way Family 2 Trailer Connector.

APPENDIX

Reprogramming the PCM / Using the Tech 2 Scan Tool – (Attachment 1)

Illustrations
- Location Illustrations
  - IP Switch Panel (Figure 1)
  - PTO Enable Switch – See Component Locations – (Figure 3)
  - Upfitter PTO Connector is shown in the connector and pin-out illustrations
- Connector Drawings
  - Upfitter Provisions Connector are shown in the connector and pin-out illustrations

Circuit Schematic References *(Circuit Schematics are shown in the Subsystem Electrical Schematic portion of the Body Builders Manual)*
- Upfitter Provision Connector – L18/LB7/LG4
- Upfitter Provision Connector – LG5
- L18 Gas Engine
- Duramax 6600 and 7.8L Diesel Engines
- Caterpillar 7.2L Diesel Engine
- PTO Operation w/Duramax 7.4L Diesel Engine

ATTACHMENT 1

REPROGRAMMING THE PCM/ECM FOR FAST IDLE/PTO USING THE TECH 2 SCAN TOOL

The Tech 2 scan tool MUST be used to enable the Fast Idle and PTO options and adjust the factory preset parameters to desired settings. The Tech 2 menu driven device is a hand held scan tool that plugs into the datalink connector located underneath the dash near the driver's seat. Once the Tech 2 is connected, the following chart will guide the user.

STEP	CURRENT MENU	SELECT
1	MAIN	F0: DIAGNOSTICS
2	VEHICLE IDENTIFICATION	YEAR OF VEHICLE
3	VEHICLE IDENTIFICATION	MEDIUM DUTY TRUCK
4	SYSTEM SELECTION	F0: POWERTRAIN
5	VEHICLE IDENTIFICATION	LP4 OR L21
6	VEHICLE IDENTIFICATION	AUTOMATIC OR MANUAL
7	POWERTRAIN	F2: SPECIAL FUNCTIONS
8	SPECIAL FUNCTIONS	F3: PTO OPTIONS
9	CURRENT PTO SETTINGS	CHANGE OPTIONS
10	PTO OPTIONS	SEE PAGE 23

TO ADJUST THE MODE OF OPERATION:

The PTO OPTIONS MENU will appear with the selections:

F0: FAST IDLE

FI: STATIONARY PRESET FAST IDLE

F2: STATIONARY VARIABLE FAST IDLE

F3: MOBILE VARIABLE FAST IDLE

Once the mode of operation is selected the **CURRENT PTO SETTINGS** menu will appear with the adjustable parameters for the current mode.

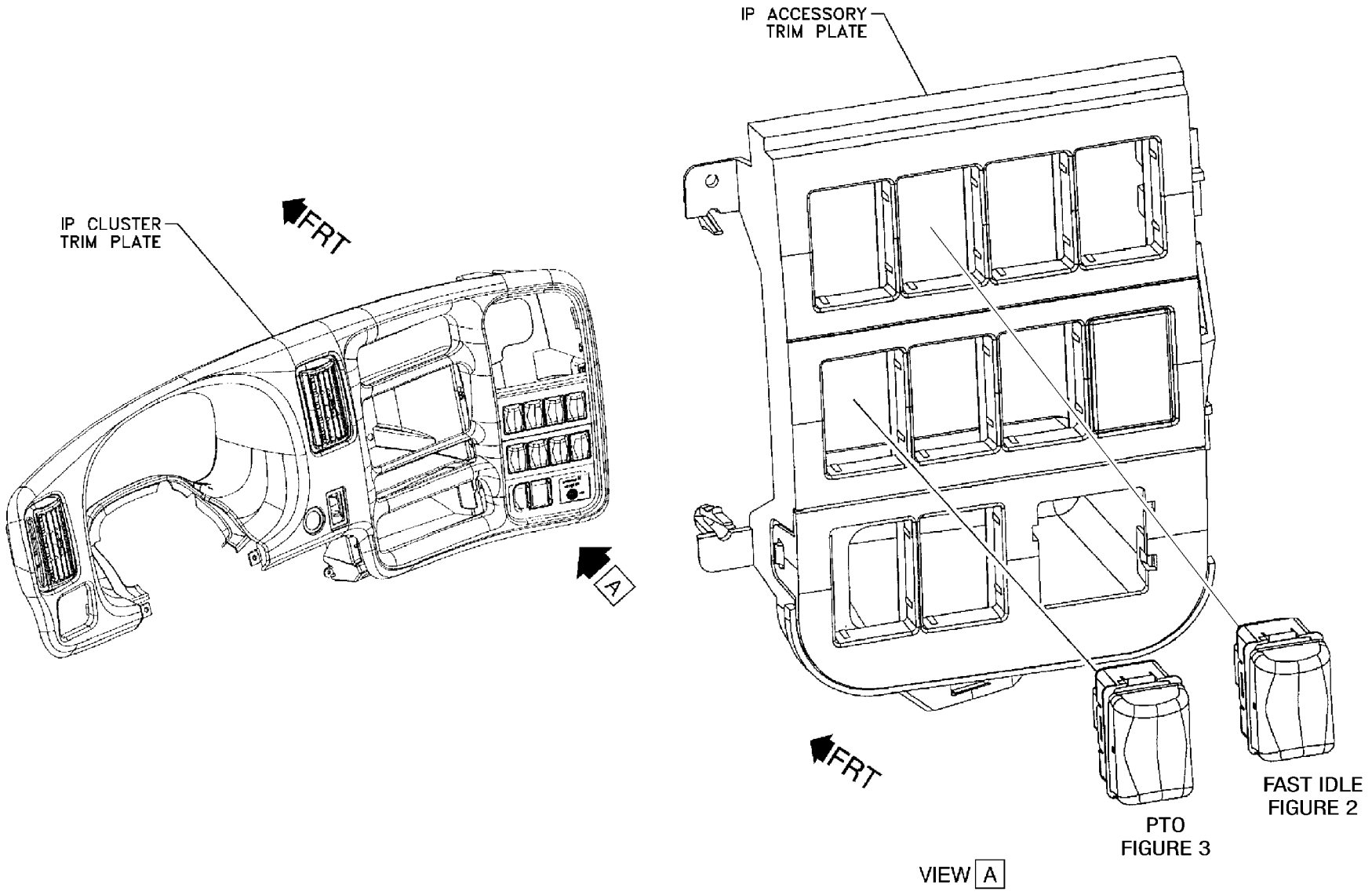
This screen allows the user to increase or decrease engine RPM values using the **INCREASE** and **DECREASE** buttons. If the Engine Fault Shutdown feature is selected, the **YES** or **NO** buttons will determine if this feature is enabled.

After all the settings are adjusted, the user will press the **REPROGRAM** button and the **CURRENT PTO SETTINGS** menu will appear with the changes. The ignition must be turned off for ten seconds to ensure that the program values are stored in the PCM.

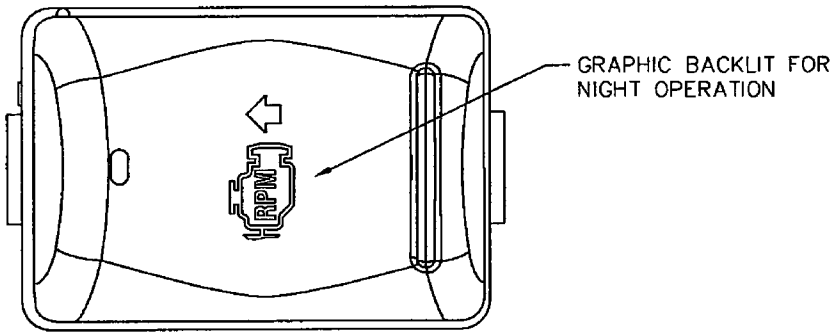
SERVICE CONSIDERATIONS

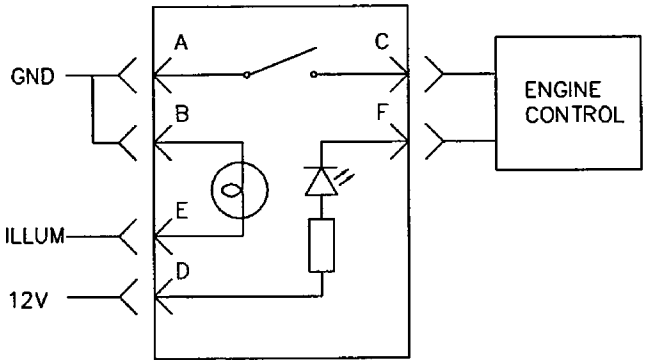
IMPORTANT: Please be aware that UF3 and PTO high idle settings must be reprogrammed in the event that the PCM is replaced. It may be advisable to provide the PCM settings information to the customer in case the PCM requires servicing during some point in the life of the vehicle.

IP, Switch Trim Plate, Fast Idle and PTO Switch Location (Figure 1)

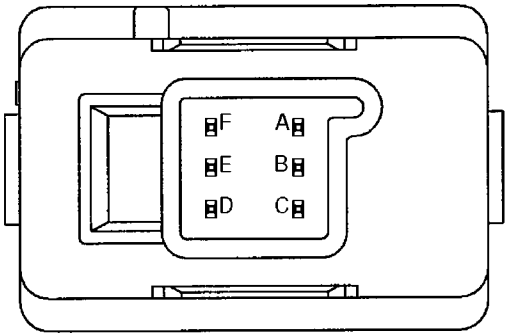


Switch – Fast Idle (Figure 2)

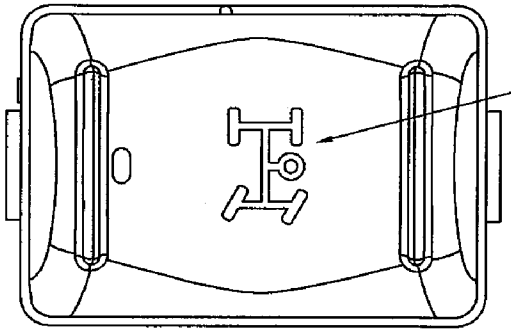


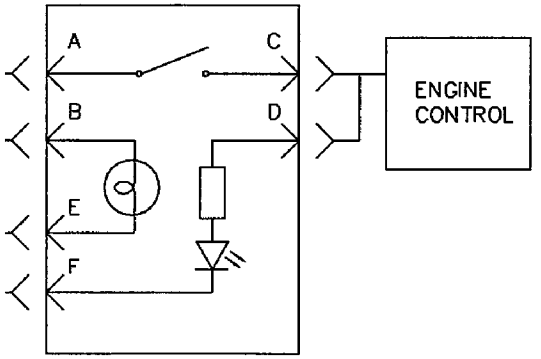


CIRCUIT SCHEMATIC



PTO Enable Switch (Figure 3)





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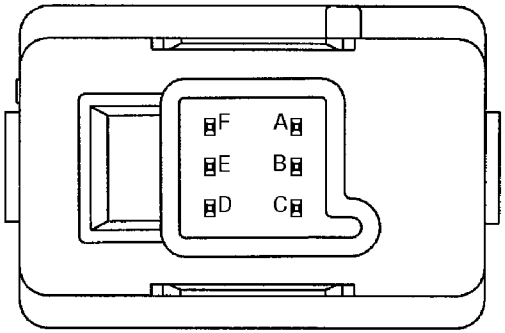
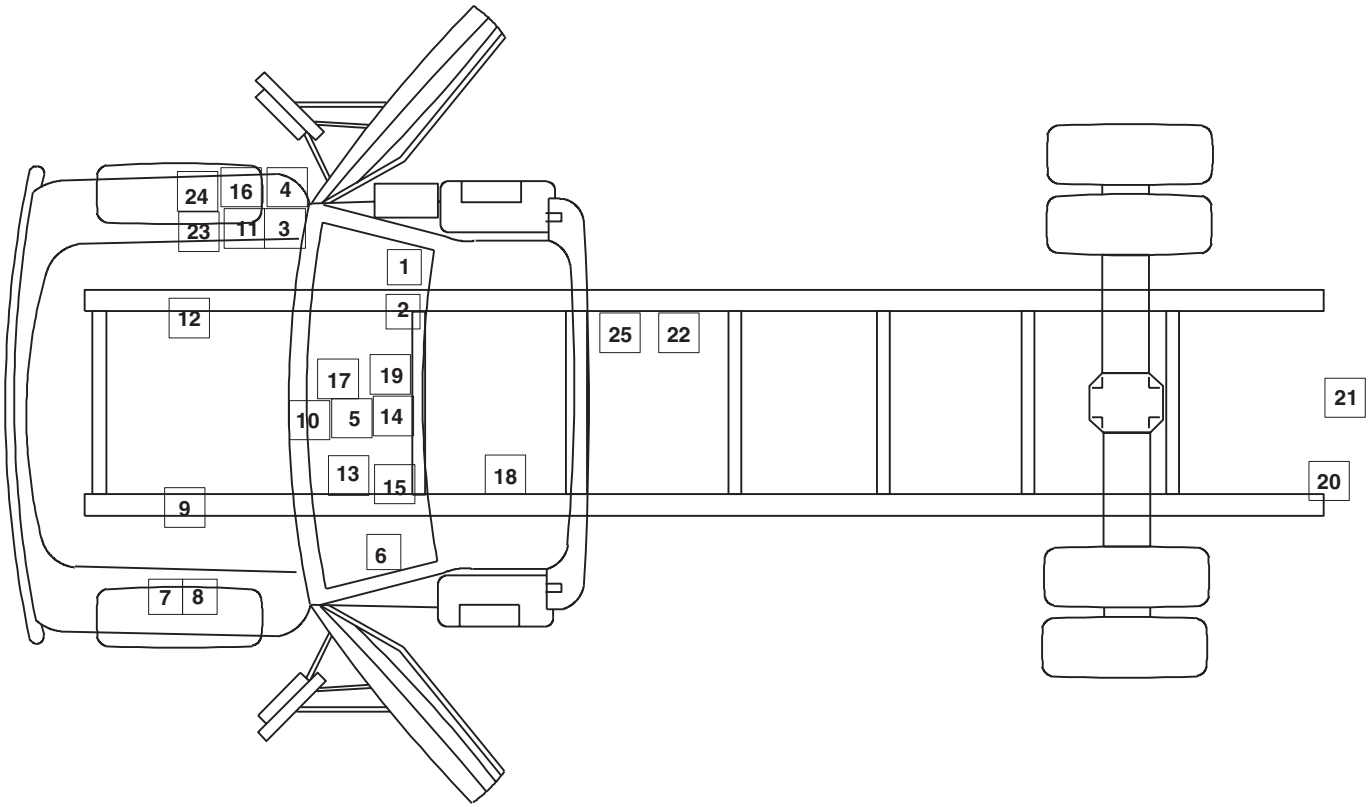


2003 & 2004 MEDIUM DUTY C SERIES ELECTRICAL

Electrical Component Legend

DATE	ESCR	L	DESCRIPTION
19OC00	N/A	A	MAJOR MODULE LOCATIONS



LOCATION LEGEND

1	IP DISTRIBUTION/RELAY CTR.
2	IP DISTRIBUTION CTR.
3	UNDERHOOD DISTRIBUTION CTR.
4	MAXI FUSE CTR.
5	CHIME/RADIO
6	DRL
7	EBC AIR/TCS
8	EBC HYD./TCS
9	ECU CAT. LG5
10	ECU ISZ LG4
11	ECU ISZ LB7
12	EDU ISZ LB7
13	ETC/PPS
14	HVAC
15	IPC
16	PCM/LCT TCM/WTEC TCM
17	RFA
18	SDM
19	TTM
20	TRAILER CONNECTOR FAM 2
21	TRAILER CONNECTOR FAM 3
22	BODY BUILDER CONNECTOR
23	TRANS OPTION CONNECTOR
24	PTO UPFITTER CONNECTOR
25	GROUND BLOCK

☐ PRELIM ☐ PROTO
☐ PROPOSAL ☒ PILOT
RELEASE LEVEL

Reference | OBJECT ID | REVISION | STAGE | VERSION | LAST CHANGED BY 9:06:20 am | ORGANIZATION
PROJECT 03 2003 M. D. C Series | h22m_ref_modules | 017 | X | 0 | 2003 Medium Duty C Series
Panel Set: 1 schematic sheet 7 SYED\WORK\h22m_ref_modules_ 017 | Wednesday, July 18, 2001

—— WIRE
— — CLASS-2 ▬ ▬ J1939

(REFERENCE)
MAJOR MODULE
LOCATIONS
GM Proprietary

FAMILY II:
JE3 : HYDRAULIC BRAKES
L18 : GMPT 8.1L V8 GAS
LB7 : DURAMAX 6600 6.6L V8 DIESEL
M74/MTW : LCT 1000/2400 AUTO TRANS
ML6 : MANUAL TRANS

FAMILY III:
JE3 : HYDRAULIC BRAKES
JE4 : AIR BRAKES
L18 : GMPT 8.1L V8 GAS
LG4 : DURAMAX 7800 7.8L L6 DIESEL
LG5 : CATERPILLAR 7.2L L6 DIESEL
MX4/MTW : LCT 2000/2400 AUTO TRANS
MNK/MNZ/MPS/MTP : MD AUTO TRANS
M69/MM7/MPU/MSC/MSG/MT3 : MANUAL TRANS
MK8/MK9/MKO/MLO/MS9/MUT/MM8 : MANUAL TRANS

FAMILY VALUES:

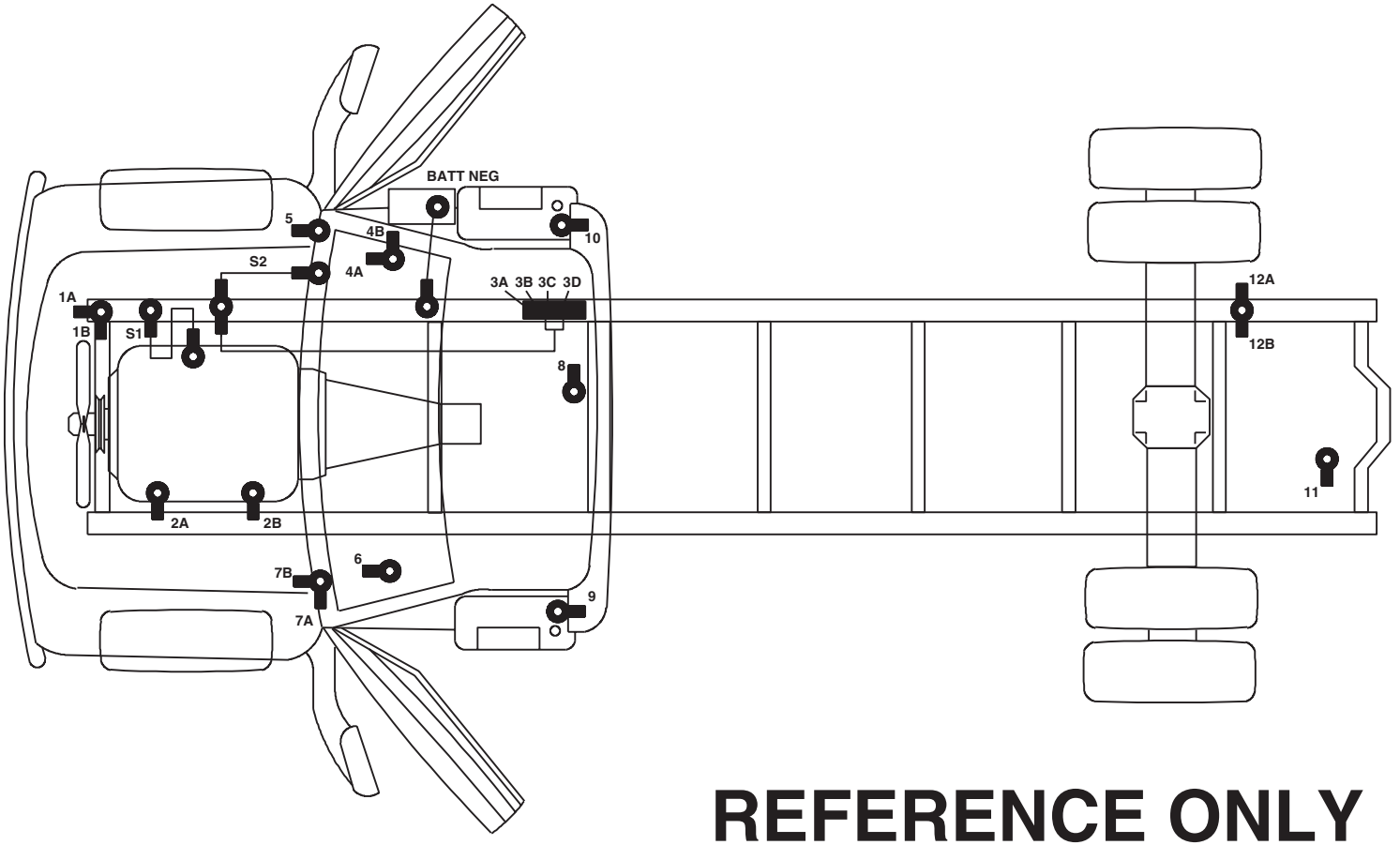
PAGE NO. 1a
PANEL 1 OF 1
FAMILY II ☒
FAMILY III ☒

CHIME - CHIME MODULE
DLC - DATA LINK CONNECTOR
DRL - DAYTIME RUNNING LAMPS
DTC - DIAGNOSTIC TOOL CONNECTOR
EBC - ELECTRONIC BRAKE CONTROL
ECU - ENGINE CONTROL UNIT - L6
EDU - ELECTRONIC DRIVER UNIT
ETC - ELECTRONIC THROTTLE CONTROL
HVAC - HVAC MODULE
IPC - INSTRUMENT PANEL CLUSTER
LCT - LIGHT COMMERCIAL TRANS
PCM - POWERTRAIN CONTROL MODULE - V8
PPS - PEDAL POSITION SENSOR
RADIO - RADIO MODULE
RFA - REMOTE FUNCTION ACTUATOR
SDG - SERIAL DATA GATEWAY
SDM - SENSING & DIAGNOSTICS MODULE
TCM - TRANSMISSION CONTROL MODULE
TCS - TRACTION CONTROL SYSTEM
TTM - TELL TALE MODULE
WTEC - TCM FOR MD TRANS

Ground Zones

03 560 000	JG	PILOT B - INITIAL CREATION	21SE00	001
03 560 000	JG	Stacked Gnd Block Conn with S2	21SE00	001

Ground Zones



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Ground Zones	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY	4:14:11 pm	ORGANIZATION	
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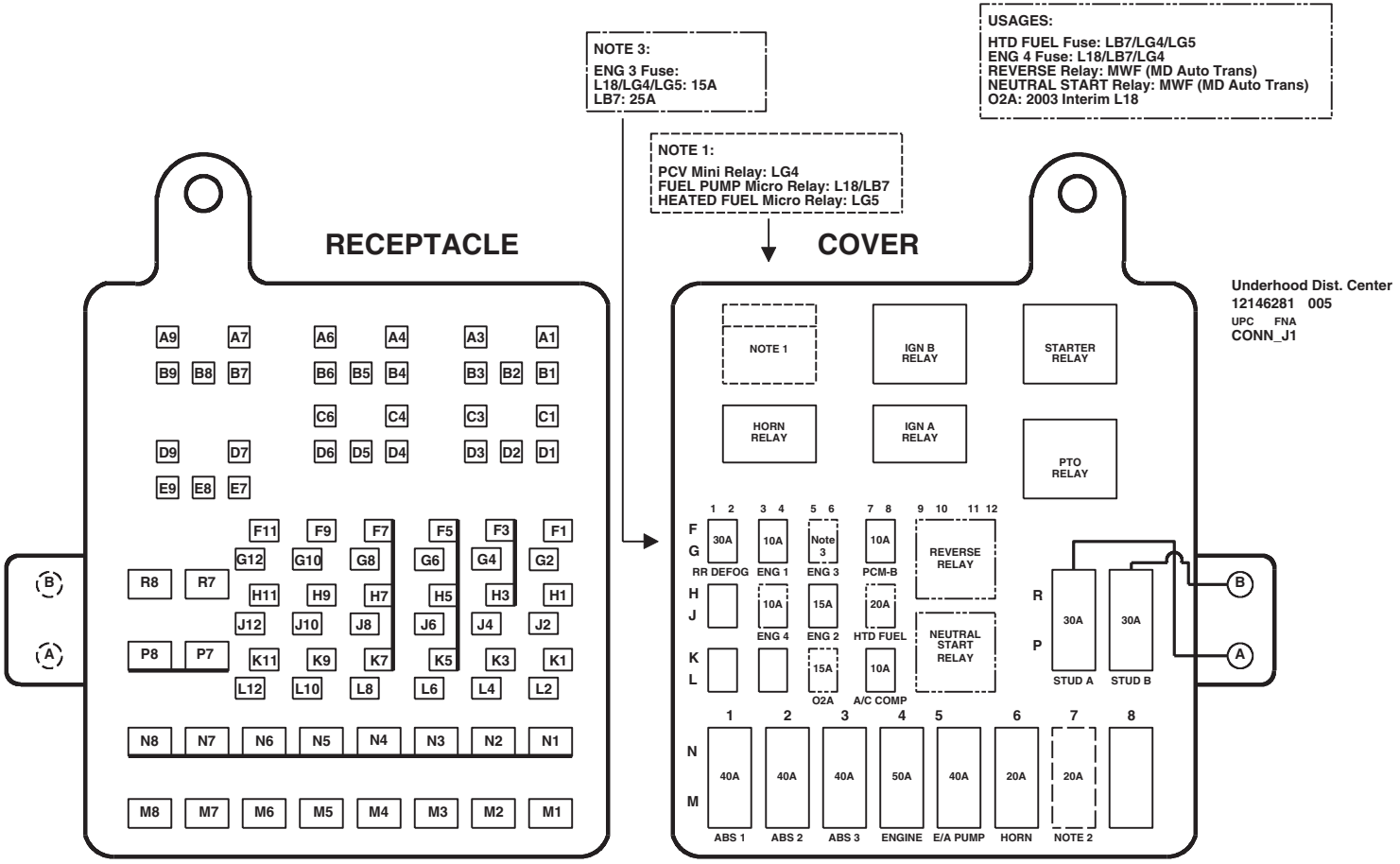
Panel Set: 1 schematic sheet1 2	$IVEDWORK/h22009a__003				Thursday, September 21, 2000		Panel Set: 1	

Underhood Distribution Center

Underhood Distribution Center



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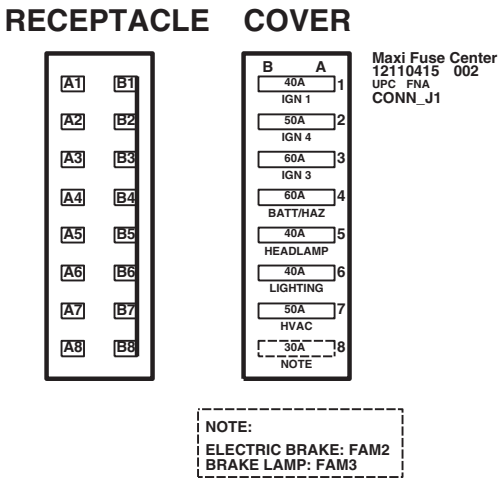
Power Distribution Centers
2003 M. D. C Series 03 X
Panel Set: 1 schematic sheet1 62

OBJECT ID h22011a
$IVEDWORK/h22011a__004

REVISION 004 STAGE Pilot VERSION B
LAST CHANGED BY Thursday, January 3, 2002 3:19:52 pm
ORGANIZATION 2003 Medium Duty C Series
Panel Set: 1

Maxi Fuse Center

Maxi Fuse Center



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Power Distribution Centers
2003 M. D. C Series 03 X
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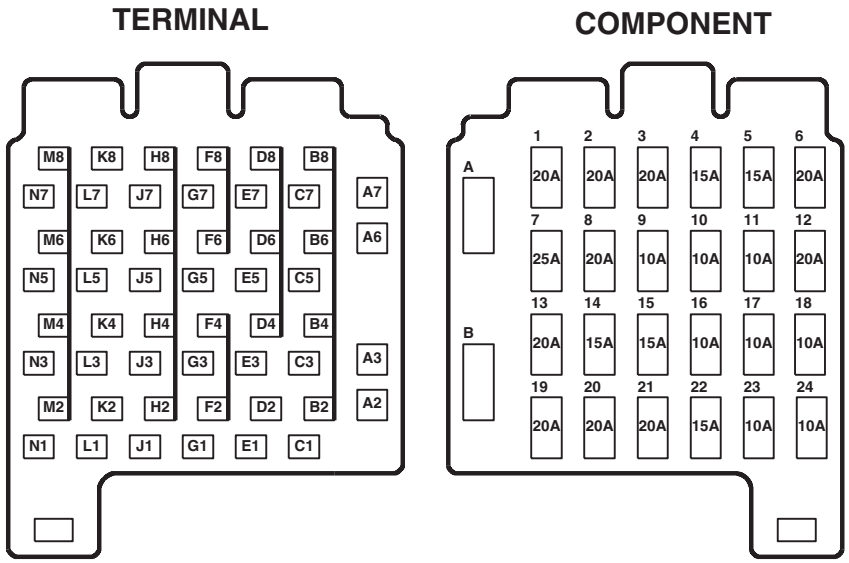
REVISION 004 STAGE Pilot VERSION B
LAST CHANGED BY Thursday, January 3, 2002 3:19:52 pm

ORGANIZATION 2003 Medium Duty C Series
Panel Set: 2

IP Distribution Center

IP Distribution Center



NUMBER	CIRCUIT BREAKER
1	STOP
2	CHMSL
3	PARK
4	PCM-I
5	AUX WIRE RLY
6	HTR/AC
7	HAZARD
8	PWR POST
9	COURTESY
10	GAUGES
11	START
12	AXLE/4WD
13	TRLR TRN/HAZ
14	RADIO/CHIME
15	DRL
16	SIR
17	ILLUM
18	BRAKE
19	PWR ACCY
20	IGN 4
21	MARKER LAMP
22	TURN/BACKUP
23	TRANS
24	CHASSIS
A	SPARE
B	SPARE

IP Electrical Center
12110746 001
UPC FNA
CONN_J1

REFERENCE ONLY

Power Distribution Centers
2003 M. D. C Series 03 X
Panel Set: 3 schematic sheet1 62

OBJECT ID h22011a
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REVISION 004
STAGE Pilot
VERSION B
LAST CHANGED BY
Thursday, January 3, 2002
3:19:52 pm

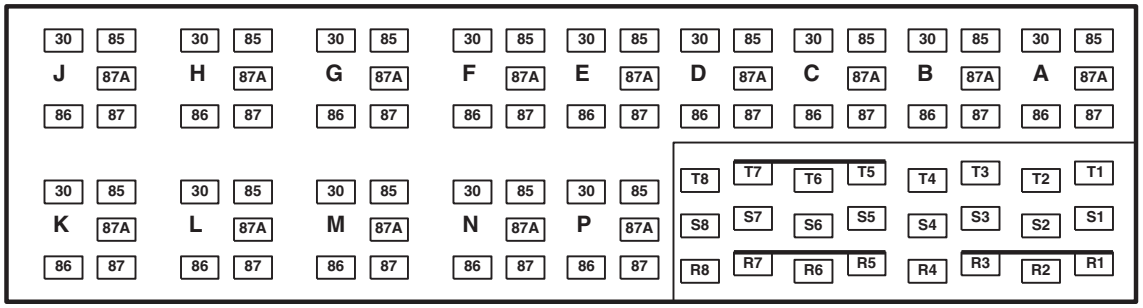
ORGANIZATION
2003 Medium Duty C Series
Panel Set: 3

IP Distribution/Relay Center

IP Distribution/Relay Center

03 560 000	JG	PILOT B - INITIAL CREATION	11OC00	001
03 560 803	JG	Underhood Center Label Change	11OC00	001
03 560 839	JG	Headlamp Fuse Rating Change from 50A to 40A	20DE00	001
03 560 854	JG	Add Air Heater Relay	17JA01	001
03 560 000	JG	Updated UH Center	07MR01	001
03 560 981	JG	Family 2 School Bus	03AP01	001
03 560 1056	LR	Remove RPO LC8	17JL01	001
03 560 1118	JG	Add SEO Content	16OC01	001
03 560 899	JG	Merged 2003 & 2003i	19DE01	001

RECEPTACLE



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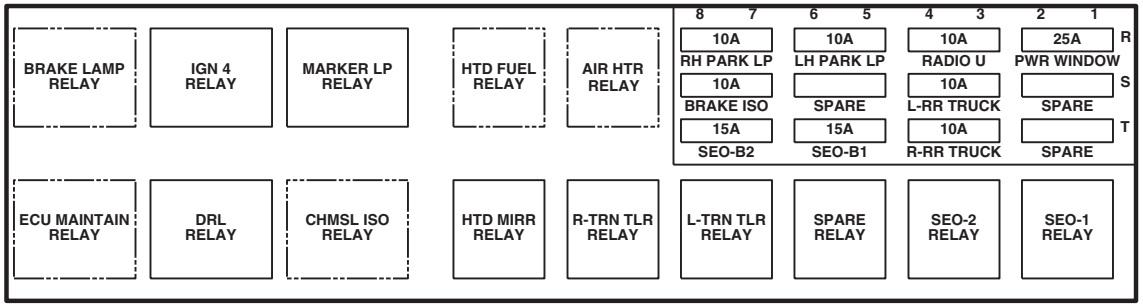


USAGES:

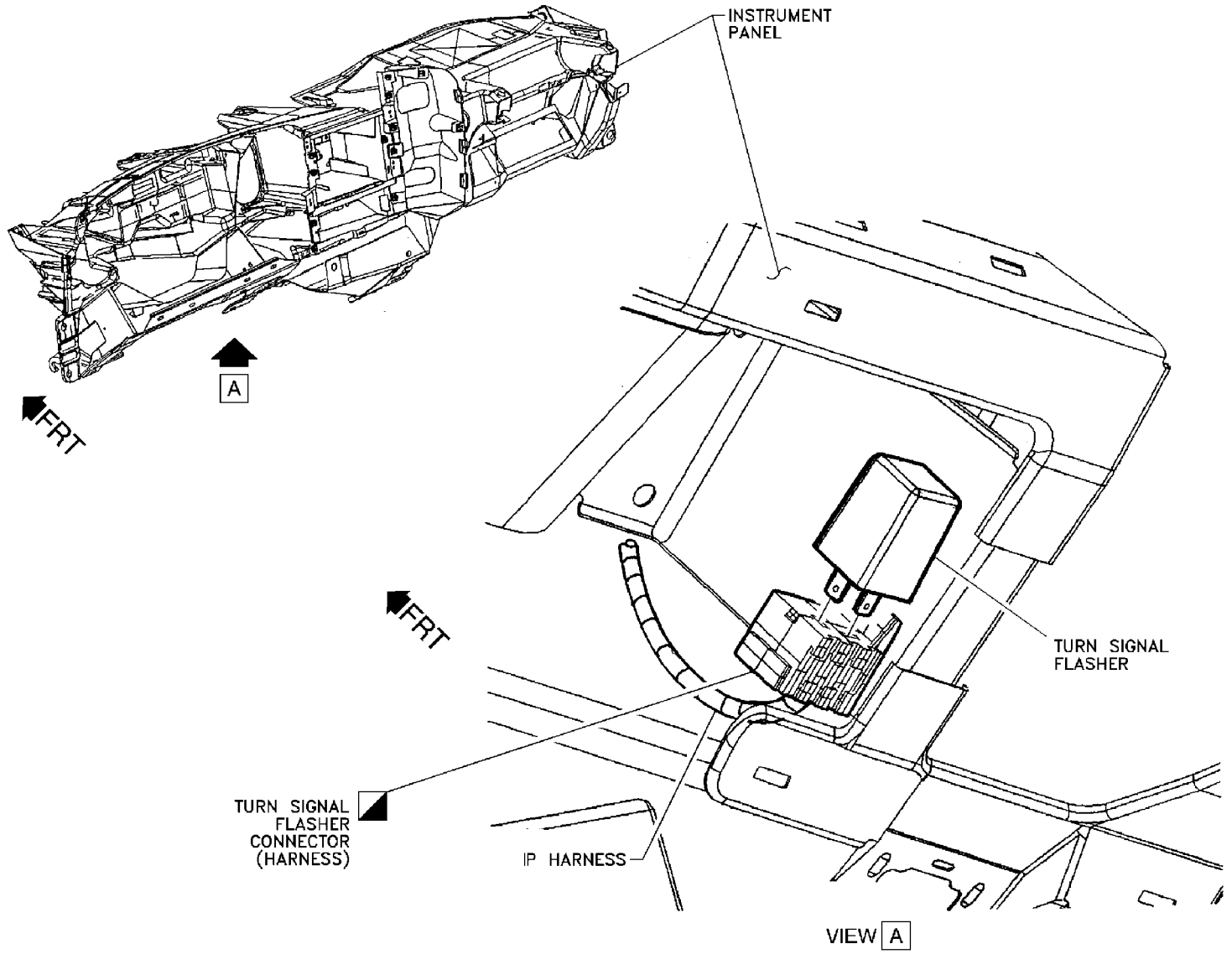
BRAKE LAMP RLY: RQ3/U86 (Family 3 Tractor/Trailer Wiring)
HEATED FUEL RELAY: LB7/LG4
ECU MAINTAIN RELAY: LG4
AIR HEATER RELAY: LG4
CHMSL ISO RELAY: -B3D (School Bus)

REFERENCE ONLY

Power Distribution Centers
2003 M. D. C Series 03 X
Panel Set: 4 schematic sheet1 62 $IVEDWORK/h22011a__004

OBJECT ID h22011a
REVISION 004
STAGE Pilot
VERSION B
LAST CHANGED BY
3:19:52 pm Thursday, January 3, 2002
ORGANIZATION 2003 Medium Duty C Series
Panel Set: 4

Turn Signal Flasher

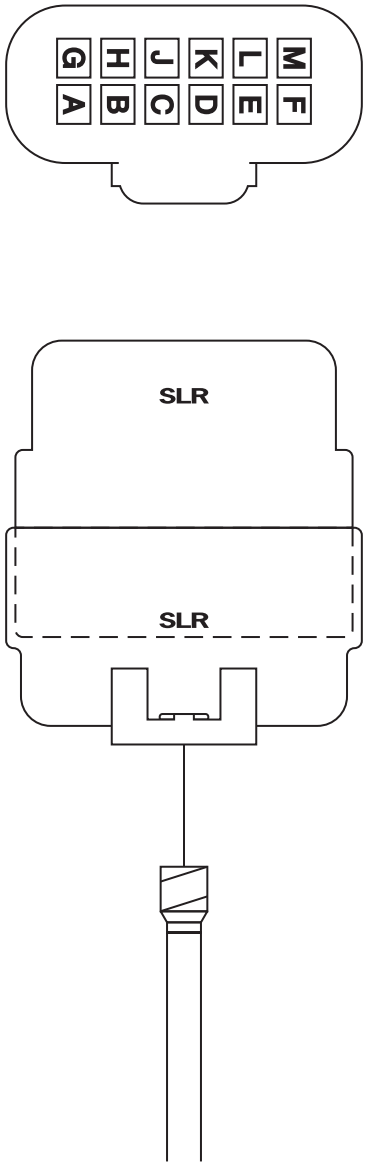


12-Way Body Builder Connector

	TRUCK SIDE	BODY BUILDER SIDE
Connector	Packard 280 Series	
Typical connector	15326910 (F)	15326915 (M)
Typical terminal	15304719	15304731
Typical cable seal	12191221	12191232

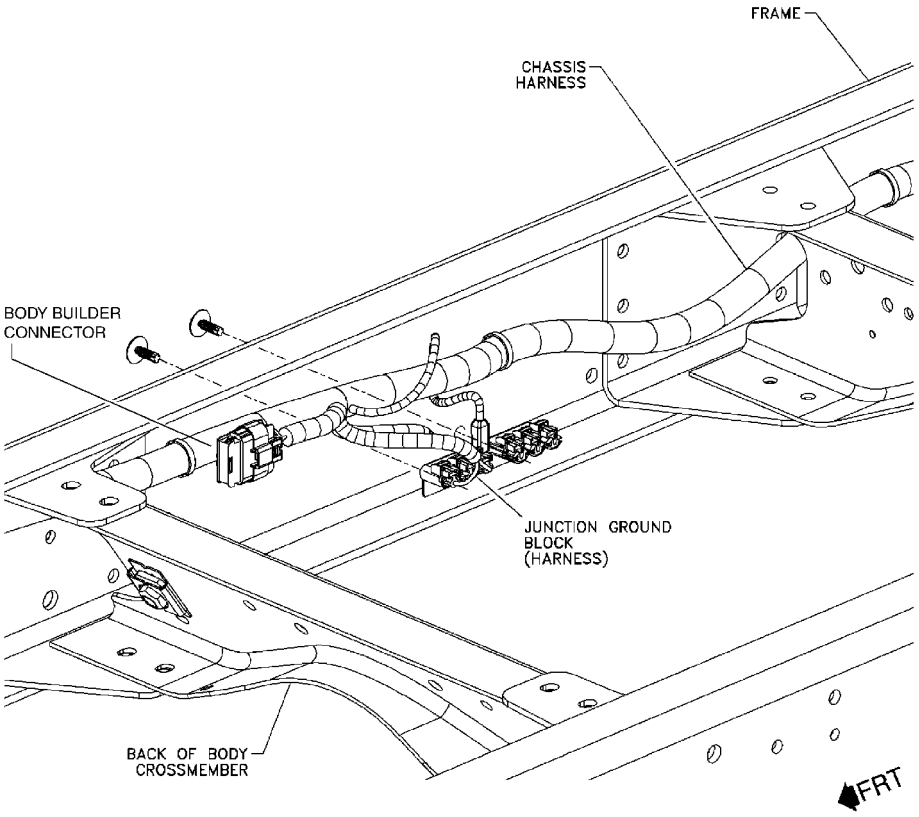
Pin	Wire		Function
	Ckt #	Color	
A	1827	YEL/BLK	128,000 Pulses/Mile*
B	2609	BRN/WHT	Right Park Lamp
C	318	YEL	Lt Stop/Turn (Fam2), Lt Turn (Fam3)
D	2509	BRN	Lt Park Lamp
E	1320	BLU LT	Stop
F	641	BRN	IGN 3 15A
G	21	GRN DK	Marker Lamp 20A
H	350	BLK	GND Zone 3B
J	TBD	—	Spare
K	319	GRN DK	Rt Stop/Turn (Fam2), Rt Turn (Fam3)
L	24	GRN LT	Back Up
M	TBD	—	Spare

* 4000 ppm LG5 only

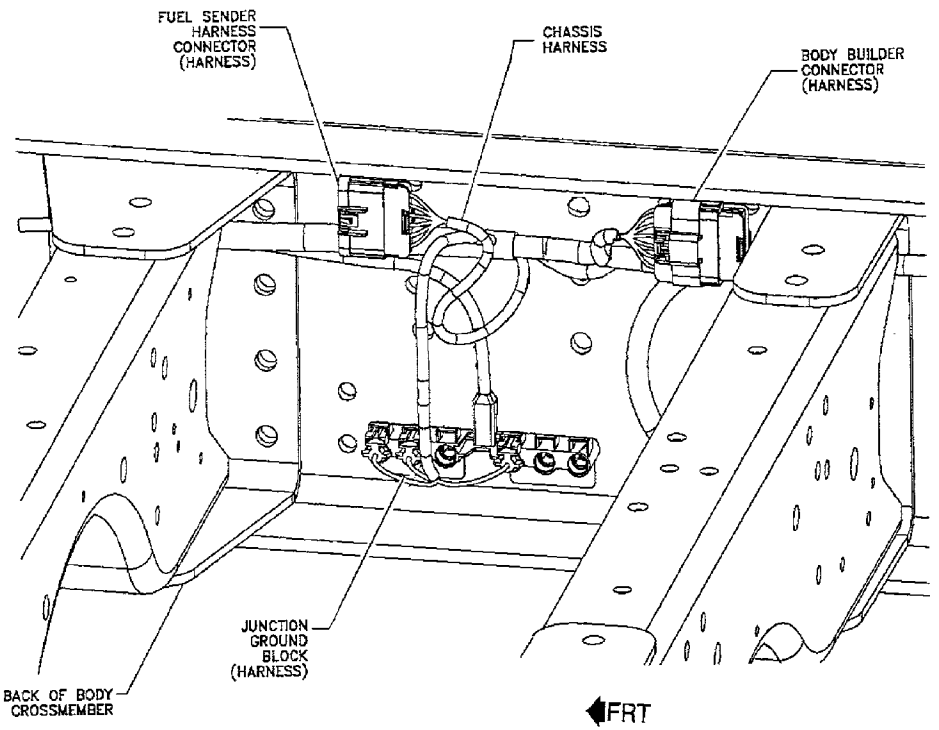


Body Builder Connector Location

Family 2



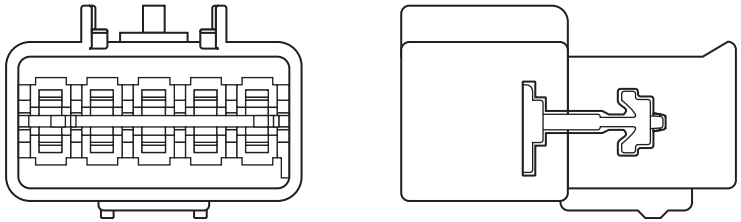
Family 3



10-Way Bus Connector (top) / 2-Way Bus Connector (bottom) – Family 2

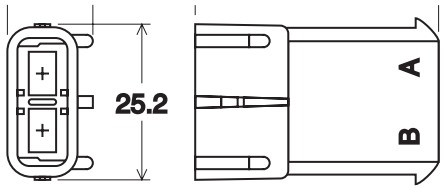
	TRUCK SIDE	BODY BUILDER SIDE
Connector	Packard GT 280 Series	
Typical connector	15326935 (M)	15326931 (F)
Typical terminal	15304722	15304710

Pin	Wire		Function
	Ckt #	Color	
A	24	GRN LT	Back Up
B	2609	BRN/WHT	Right Park
C	318	YEL	Left Turn
D	2509	BRN	Left Park
E	1320	BLU LT	Stop
F	—	—	Spare
G	—	—	Spare
H	350	BLK	Gnd Zone 3B
J	—	—	Spare
K	319	GRN DK	Right Turn

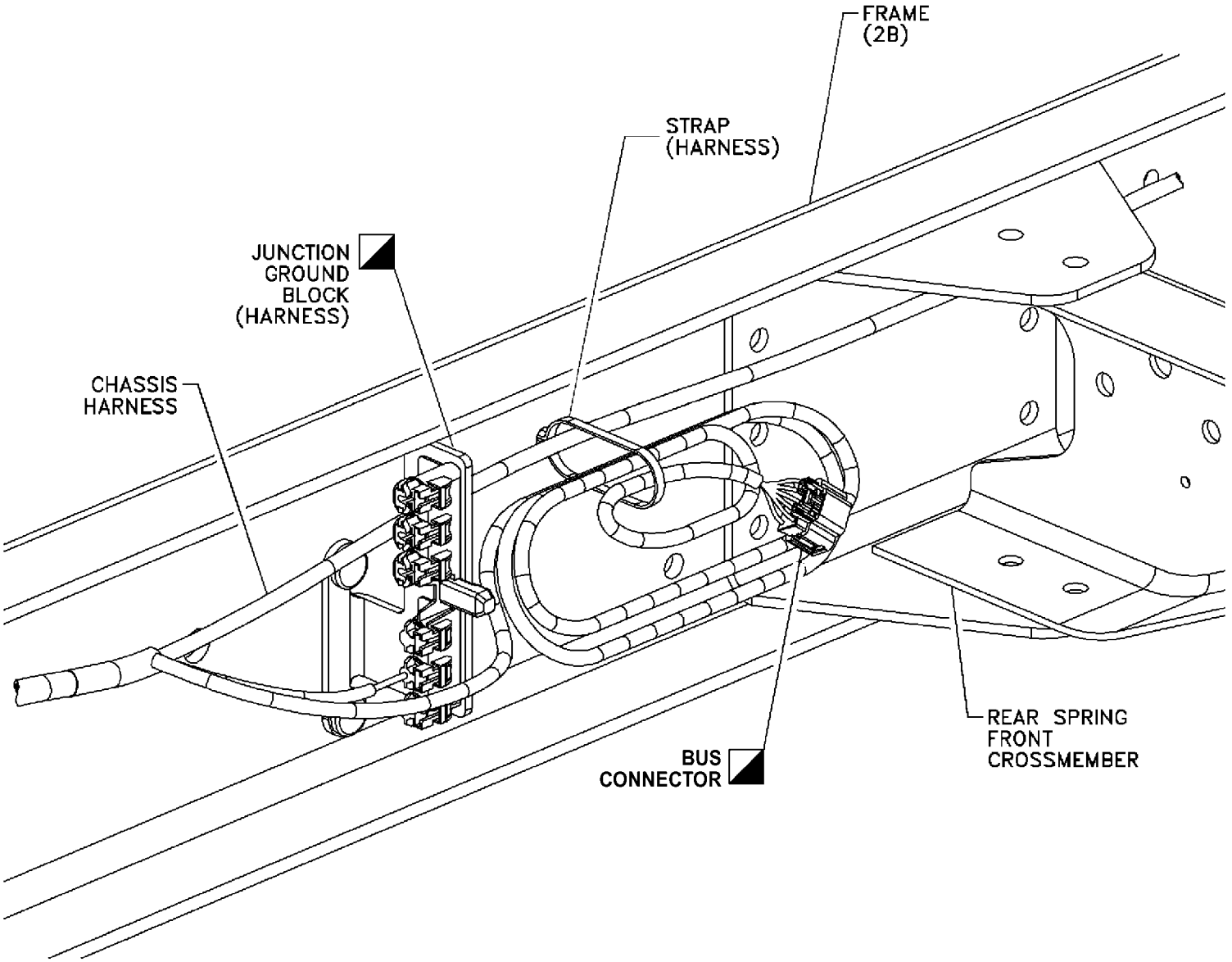


	TRUCK SIDE	BODY BUILDER SIDE
Connector	Packard MP 280 Series	
Typical connector	15300027 (F)	15300002
Typical terminal	12129493	12129497
Typical cable seal	15324980	15324980

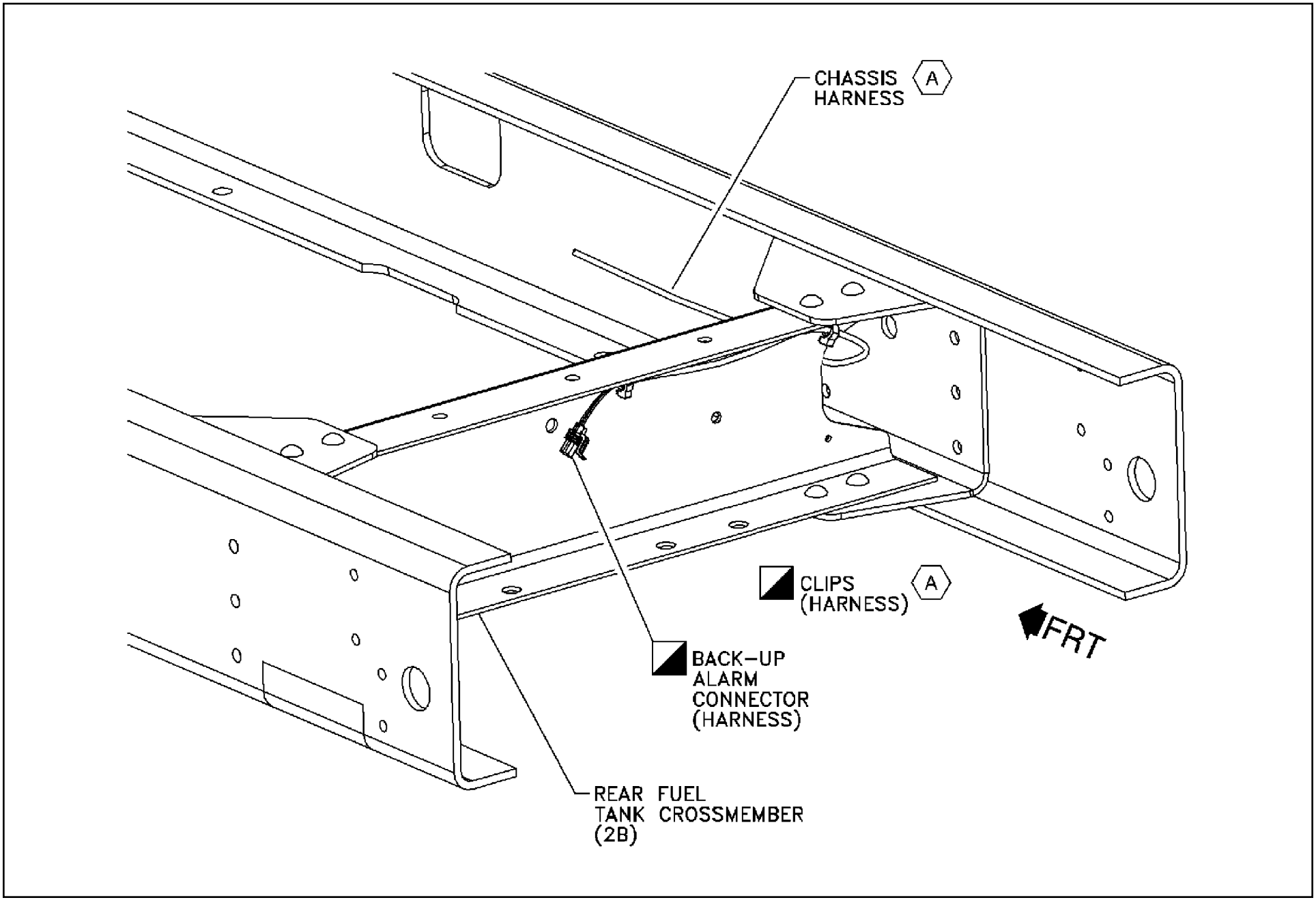
Pin	Wire		Function
	Ckt #	Color	
A	24	GRN LT	Back Up
B	350	BLK	Gnd Zone B



Bus Connector Location – Family 2



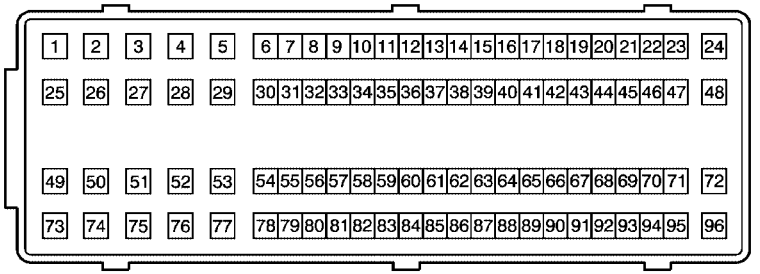
Bus Connector Location – Family 2



(LG4 '04i) ECE Engine Control Module (ECM) – Connector C-1

Connector	96-Way F Bosch (BK)
Typical connector	1928404781 (F)
Color	**BLK**
Typical Terminal	– – –
Typical Cable Seal	– – –

Pin	Wire Color	Circuit No.	Function
1	BK	CU15	Ground
2	BK	CU09	Ground
3	BK	CU10	Ground
4	BK	CU13	Ground
5	BK	CU14	Ground
6	—	—	Not Used
7	BN	CF13	Low Reference
8	VT	CF16	Low Reference
9	RD	CF19	Low Reference
10	BU/YE	DF24	Low Reference
11	—	—	Not Used
12	BK/YE	CF96	Low Reference
13	—	—	Not Used
14	GY	OA19	Ground (Allison® LCT)
14	BK/YE	DF41	Drain Wire (M/T)
15-16	—	—	Not Used
17	BU/WH	CF36	CAN High
18	BN	CF37	CAN Low
19	—	—	Not Used
20	GN	CF34	ECM Class 2 Serial Data A
21	—	—	Not Used
22	PK	DF55	Ignition 2 Voltage
23	PK	CF10	Ignition 1 Voltage
24-25	—	—	Not Used
26	BK	CU11	Ground
27	BK	CU12	Ground
28	WH	CF22	Engine Speed Signal
29-30	—	—	Not Used



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(LG4 '04i) ECE Engine Control Module (ECM) – Connector C-1 (continued)

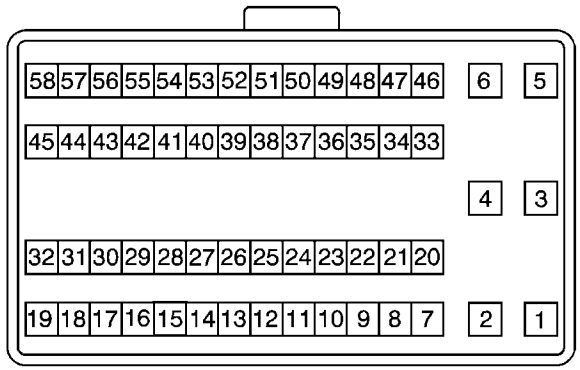
Pin	Wire Color	Circuit No.	Function
31	BU	CF12	APP Sensor 1 Signal
32	L-GN	CF15	APP Sensor 2 Signal
33	GN	CF18	APP Sensor 3 Signal
34	BU/RD	DF22	PTO Accel Switch Signal
35-36	—	—	Not Used
37	VT	CF97	Fuel Level Signal – Primary
38	BU	CF99	Fuel Level Signal – Secondary
39	WH	OA16	VSS High Signal (Allison® LCT)
39	WH	DF38	VSS High Signal (M/T)
40	BK	DF39	VSS Low Signal (M/T)
41	RD/BK	DF59	Generator Field Duty Cycle Signal
42	—	—	Not Used
43	RD/BU	DF56	Shift – Signal
44-45	—	—	Not Used
46	RD/BK	DF50	Cruise Control On Switch Signal
47	RD	DF48	Cruise Control Res/Acc Switch Signal
48	BU	DF47	Cruise Control Set/Coast Switch Signal
49	BN	CF04	Ignition 1 Voltage
50	BN	CF05	Ignition 1 Voltage
51	BU/OG	CF08	Battery Positive Voltage
52	WH	CF06	ECM Power Enable Signal
53	WH	CF07	ECM Power Enable Signal
54	WH/BK	CF11	5-Volt Reference
55	BK/WH	CF14	5-Volt Reference
56	YE/BK	CF17	5-Volt Reference
57	—	—	Not Used
58	BU/WH	DF22	5-Volt Reference
59-60	—	—	Not Used
61	RD	DF60	Charge Indicator Control
62	WH	DF43	Stop Lamp Switch Signal (JE3)
62	WH	DF46	Stop Lamp Switch Signal (JE4)

Pin	Wire Color	Circuit No.	Function
63	RD/BU	DF45	Stop Lamp Switch Signal
64	BK/OG	CF29	CPP Switch Signal
65	—	—	Not Used
66	RD/BU	DF12	Diagnostic Clear Switch Signal
67	WH	CF32	Exhaust Brake Request Switch
68	GN	CF24	High Idle Switch Signal
69	—	—	Not Used
70	L-GN	DF61	Low Coolant Level Indicator Control
71	L-GN	BA03	Reverse Switch Signal
72-73	—	—	Not Used
74	YE	HB04	Glow Plug Relay Control
75	VT	WB05	PTO Control
76	YE	DF58	Starter Relay Coil Control
77	VT	DF44	Exhaust Brake Relay Control
78	RD	CF26	High Idle Indicator Control
79	BU	CF21	Wait to Start Indicator Control
80	BK/WH	CF20	MIL Control
81	GN WH	CF23	Vehicle Speed Signal
82	WH/BK	DF57	Vehicle Speed Signal
83-85	—	—	Not Used
86	WH/BK	DF01	Brake/Clutch Switch Override Signal
87	—	—	Not Used
88	RD/BK	DF02	PTO Disable Switch – Signal – Cab
89	BK/WH	DF04	PTO Set Switch Signal A
90	GN/WH	DF03	PTO Set Switch Signal B
91	BK/YE	DF05	PTO Set Switch Signal – Remote
92	WH/RD	DF06	PTO Resume Switch Signal – Remote
93	L-GN	WB09	PTO On Switch – Signal
94	L-GN	WB12	PTO Engine Kill Signal
95	BU/RD	WB11	PTO Status Signal
96	YE	CF35	PNP/Clutch Start Switch Signal

(LG4 '04i) ECE Engine Control Module (ECM) – Connector C-2

Connector	58-Way F Bosch (BK)
Typical connector	1928404752 (F)
Color	**BLK**
Typical Terminal	– – –
Typical Cable Seal	– – –
Individual Cable Seal	– – –

Pin	Wire Color	Circuit No.	Function
1	BK	B1	Turbocharger Vane Position Control Solenoid Valve High Control
2	—	—	Not Used
3	WH	B3	Fuel Injector Supply Voltage 1
4	RD	B4	Fuel Injector Supply Voltage 2
5	WH	B5	Fuel Injector Supply Voltage 1
6	RD	B6	Fuel Injector Supply Voltage 2
7	BK/WH	B7	EGR Motor U Supply Voltage
8	GN	B8	EGR Motor V Supply Voltage
9	RD/YE	B9	EGR Motor W Supply Voltage
10	—	—	Not Used
11	BK	B11	Not Used
12	BK	B12A	Low Reference
13	BK	B13A	Low Reference
14	BK/YE	B14	Low Reference
15	GY	B15A	Low Reference
16	BK	B16A	Low Reference
17	WH/BK	B17	Ground
18	BK	B18A	Drain Wire
19	GY	B19	Drain Wire
20	RD	B20	SCV Low Signal
21	RD	B21	SCV Low Signal
22	—	—	Not Used
23	RD	B23	Not Used
24	WH	B24	MAP Sensor Signal



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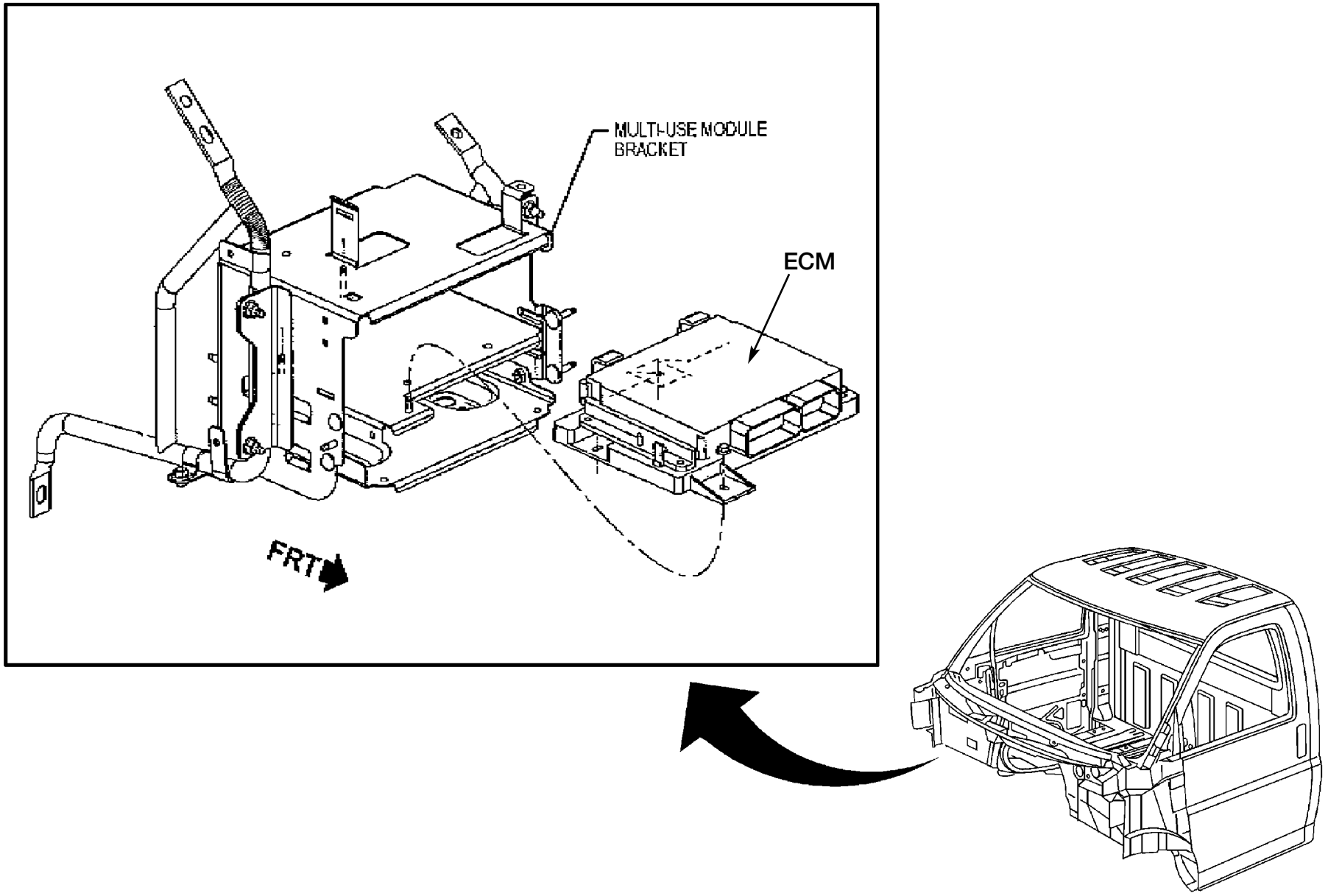
(LG4 '04i) ECE Engine Control Module (ECM) – Connector C-2 (continued)

Pin	Wire Color	Circuit No.	Function
25	WH	B25A	Fuel Pressure Sensor Signal
26	WH	B26	Fuel Pressure Sensor Signal
27	GY	B27	Oil Pressure Sensor Signal
28	WH	B28	MAF Sensor Signal
29	WH	B29	Turbocharger Vane Position Signal
30	WH	B30	CMP Sensor Low
31	WH	B31	CKP Sensor High
32	BK	B32	CKP Sensor Low
33	WH	B33	SCV High Signal
34	WH	B34	SCV High Signal
35	BU/WH	B35	ECT Sensor Signal
36	—	—	Not Used
37	GN/WH	B37	IAT Sensor Signal
38	BU/RD	B38	EGR Motor Position U Signal
39	WH/RD	B39	EGR Motor Position V Signal
40	YE/RD	B40	EGR Motor Position W Signal

Pin	Wire Color	Circuit No.	Function
41	YE	B41	Fuel Temperature Sensor Signal
42	RD	B42	Low Reference
43	RD	B43	Fuel Injector 6 Control
44	BK	B44	Fuel Injector 4 Control
45	BK/RD	B45	Fuel Injector 5 Control
46	RD	B46	5-Volt Reference
47	RD	B47	5-Volt Reference
48	WH	B48	5-Volt Reference
49	WH	B49	5-Volt Reference
50	RD	B50	5-Volt Reference
51	RD	B51	5-Volt Reference
52	GN	B52	Oil Level Switch Signal
53-55	—	—	Not Used
56	WH	B56	Fuel Injector 3 Control
57	BU	B57	Fuel Injector 2 Control
58	YE	B58	Fuel Injector 1 Control

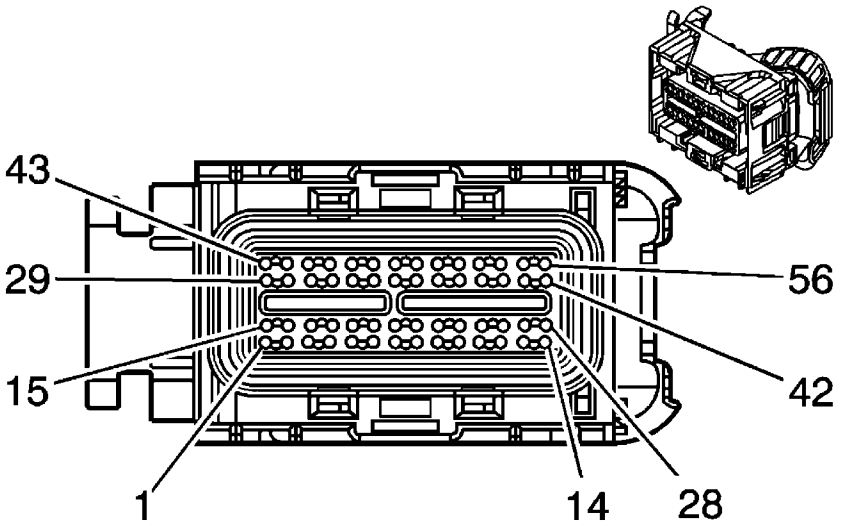
(LG4 '04i) ECE Engine Control Module (ECM) Location



(LLY) Engine Control Module (ECM) – Connector C-1

Connector	56-Way F Micro-Pack 64 Series (BU)
Typical connector	15357147 (F)
Color	**BLU**
Typical Terminal	– – –
Typical Cable Seal	– – –

Pin	Wire Color	Circuit No.	Function
1	YE	2361	SAE J1939 Serial Data Bus+
2	D-GN	2362	SAE J1939 Serial Data Bus–
3-4	—	—	Not Used
5	OG	440	Battery Positive Voltage
6	—	—	Not Used
7	OG/BK	1057	Low Reference
8	PK/BK	632	Low Reference
9	BK/WH	351	Ground
10	PK	439	Ignition 1 Voltage
11	—	—	Not Used
12	D-GN	534	High Idle Switch Signal
13	YE	492	MAF Sensor Signal
14	BN/WH	5763	EGR Sensor Signal
15	D-GN	1049	ECM Class 2 Serial Data
16	—	—	Not Used
17	TN	1274	5-Volt Reference
18	PK	1020	Ignition 0 Voltage
19	PK	439	Ignition 1 Voltage
20	OG	440	Battery Positive Voltage
21-22	—	—	Not Used
23	TN	5928	5-Volt Reference
24-25	—	—	Not Used
26	D-BU	507	Wait to Start Indicator Control
27	—	—	Not Used
28	L-BU	1162	APP Sensor 2 Signal
29	—	—	Not Used



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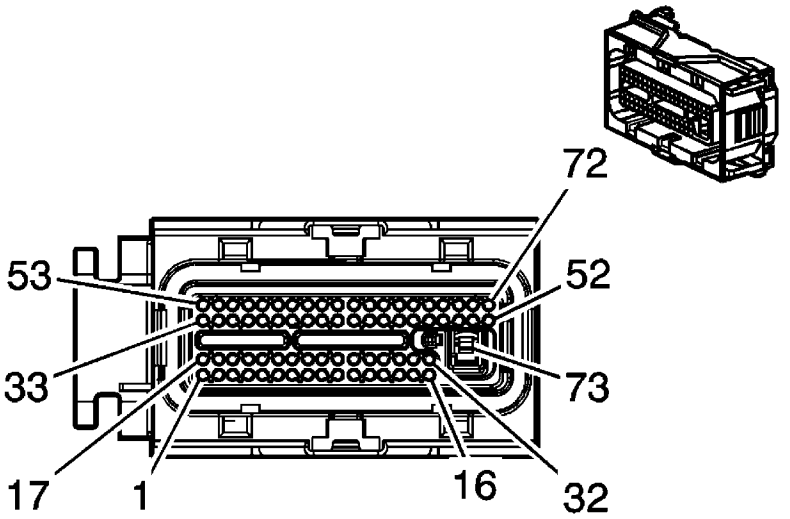
(LLY) Engine Control Module (ECM) – Connector C-1 (continued)

Pin	Wire Color	Circuit No.	Function
30	PU	1589	Fuel Level Sensor Signal – Primary
31	WH/BK	2932	5-Volt Reference
32	WH/BK	1164	5-Volt Reference
33	TN	2917	5-Volt Reference
34	GY	2705	5-Volt Reference
35	—	—	Not Used
36	YE/BK	1275	5-Volt Reference
37	YE	2834	Fuel Pressure Regulator Solenoid Control
38	—	—	Not Used
39	GY	597	5-Volt Reference
40	PU/WH	2530	Fuel Pressure Regulator Solenoid Supply Voltage
41	GY	23	Generator Field Duty Cycle Signal
42	PK	339	Ignition 1 Voltage
43	D-BU	1936	Fuel Level Sensor Signal – Secondary
44	D-GN/WH	465	Fuel Pump Relay Control – Primary
45	PU	2656	Engine Exhaust Brake Restore Request (w/o NPE)
46	YE/BK	1827	Vehicle Speed Signal
47	GY	2703	5-Volt Reference
48-49	—	—	Not Used
50	RD	631	12-Volt Reference
51	YE	2834	Fuel Pressure Regulator Solenoid Control
52	GY	2219	IGN B Relay Control
53	D-GN/WH	817	Vehicle Speed Signal
54	PU/WH	2530	Fuel Pressure Regulator Solenoid Supply Voltage
55	—	—	Not Used
56	PK	339	Ignition 1 Voltage

(LLY) Engine Control Module (ECM) – Connector C-2

Connector	73-Way F Micro-Pack 64 Series (BK)
Typical connector	15357133 (F)
Color	**BLK**
Typical Terminal	– – –
Typical Cable Seal	– – –

Pin	Wire Color	Circuit No.	Function
1	—	—	Not Used
2	OG/BK	2919	Low Reference
3	—	—	Not Used
4	BN	25	Charge Indicator Control
5-7	—	—	Not Used
8	BK	2754	Low Reference
9-10	—	—	Not Used
11	L-GN	2081	Engine Exhaust Brake Switch Control (K40)
12-13	—	—	Not Used
14	GY	720	Low Reference
15-16	—	—	Not Used
17	YE/BK	508	Water in Fuel Indicator Control
18	—	—	Not Used
19	D-BU	1161	APP Sensor 1 Signal
20-22	—	—	Not Used
23	L-GN	432	MAP Sensor Signal
24	D-GN	1163	APP Sensor 3 Signal
25	TN/WH	332	Oil Pressure Sensor Signal
26	BN	1174	Oil Level Switch Signal
27	YE	1578	Fuel Temperature Signal
28	L-GN	1867	12-Volt Reference
29	GY/BK	2931	Ground
30	OG/BK	469	Low Reference
31	YE	5947	Turbocharger Vane Position Sensor Signal



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(LLY) Engine Control Module (ECM) – Connector C-2 (continued)

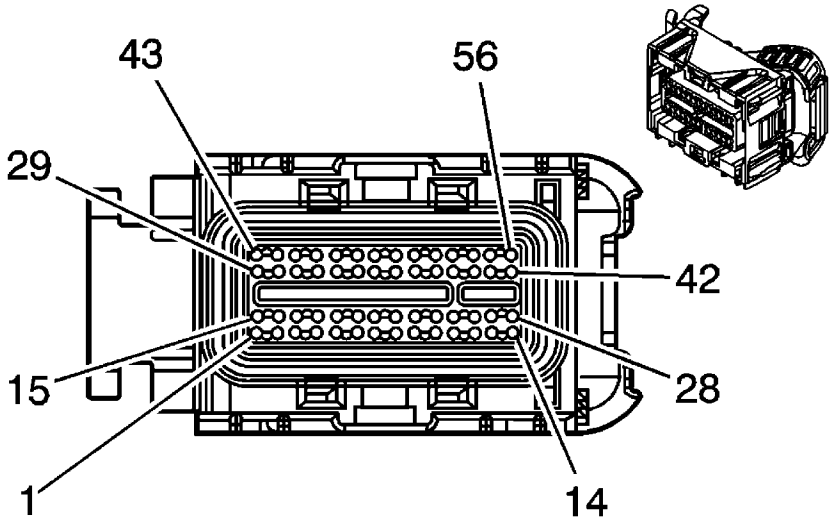
Pin	Wire Color	Circuit No.	Function
32	—	—	Not Used
33	OG/BK	5764	EGR Valve High Control
34	D-GN	603	A/C Low Pressure Switch Signal
35	L-GN/BK	5746	EGR Valve Low Control
36	BK/WH	351	Ground
37	—	—	Not Used
38	L-GN	1478	Coolant Level Switch Signal
39	BK	2755	Low Reference
40	BN	1271	Low Reference
41	—	—	Not Used
42	YE	2918	FRP Sensor Signal
43	—	—	Not Used
44	OG/BK	5929	Low Reference
45	—	—	Not Used
46	GY/BK	433	Baro Sensor Signal
47-48	—	—	Not Used
49	D-BU	5930	Turbocharger Vane Position Control Solenoid Valve Control Circuit
50	WH	5931	Low Reference
51	—	—	Not Used
52	PK/BK	1746	Fuel Injector 3 Control
53	OG/BK	5764	EGR Valve High Control

Pin	Wire Color	Circuit No.	Function
54	PU	1272	Low Reference
55	L-GN/BK	5746	EGR Valve Low Control
56	GY	1273	Low Reference
57	BN	2524	Generator 2 Turn On Signal (K65)
58	BK	552	Low Reference
59	—	—	Not Used
60	L-BU	1320	Stop Lamp Supply Voltage
61	PU	420	TCC Brake Switch/Cruise Control Release Signal
62	—	—	Not Used
63	L-BU	2832	Engine Speed Signal
64	BK	470	Low Reference
65	L-GN/BK	1745	Fuel Injector 2 Control
66	RD/BK	877	Fuel Injector 7 Control
67	YE	410	ECT Sensor Signal
68	D-BU/WH	878	Fuel Injector 8 Control
69	L-BU/BK	844	Fuel Injector 4 Control
70	BK/WH	845	Fuel Injector 5 Control
71	YE/BK	846	Fuel Injector 6 Control
72	BK	1744	Fuel Injector 1 Control
73	BK/WH	351	Ground

(LLY) Engine Control Module (ECM) – Connector C-3

Connector	56-Way F Micro-Pack 64 Series (GY)
Typical connector	15357148 (F)
Color	**GRY**
Typical Terminal	– – –
Typical Cable Seal	– – –

Pin	Wire Color	Circuit No.	Function
1	L-BU	494	Engine Shut Off Signal
2-5	—	—	Not Used
6	L-GN	488	PTO On Switch Signal
7	BK/WH	1962	Exhaust Brake Telltale Switch Signal (K40)
8-9	—	—	Not Used
10	PK	339	Ignition 1 Voltage
11	—	—	Not Used
12	D-BU	2221	VSS High Signal
13	—	—	Not Used
14	PK	339	Ignition 1 Voltage
15-16	—	—	Not Used
17	YE	2522	PTO Engage Signal
18	D-GN	1433	Clutch Start Switch Signal
19	D-BU	84	Cruise Control Set/Coast Switch Signal
20	D-GN/WH	762	A/C Request Signal
21	—	—	Not Used
22	GY/BK	87	Cruise Control Resume/Accel Switch Signal
23	D-GN	2222	VSS Low Signal (M/T)
24	TN	472	IAT Sensor Signal
25-29	—	—	Not Used
30	GY	397	Cruise Control On Switch Signal
31	OG/BK	1786	Park/Neutral Signal (A/T)
32-34	—	—	Not Used
35	YE	447	Starter Relay Coil Control
36	—	—	Not Used



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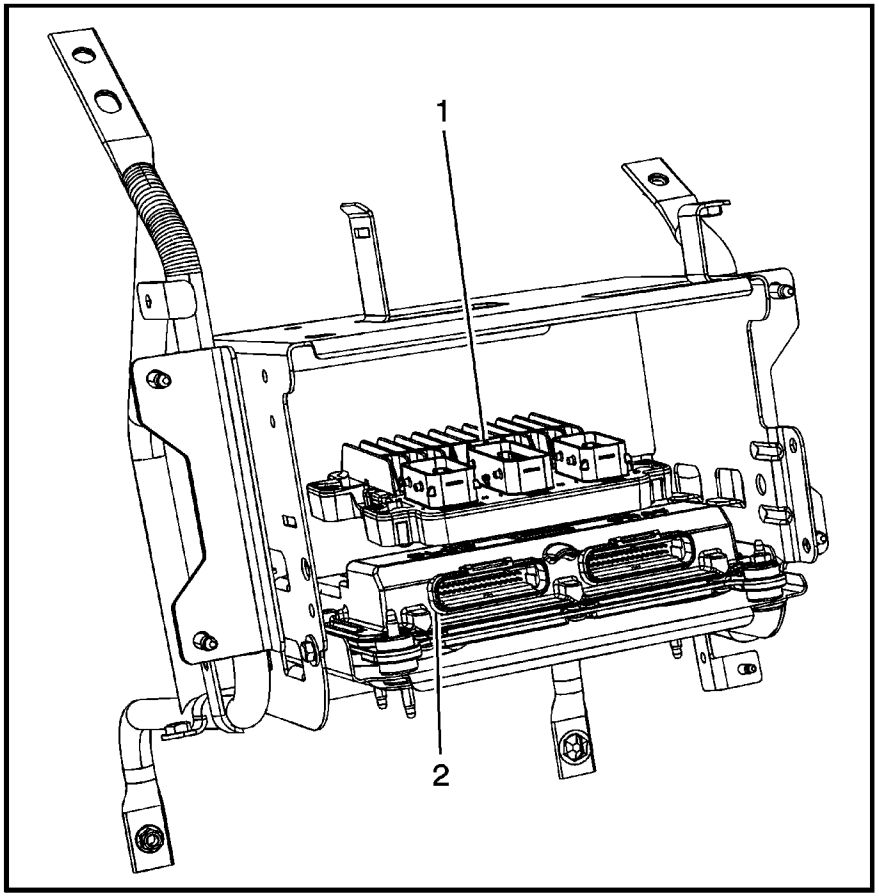
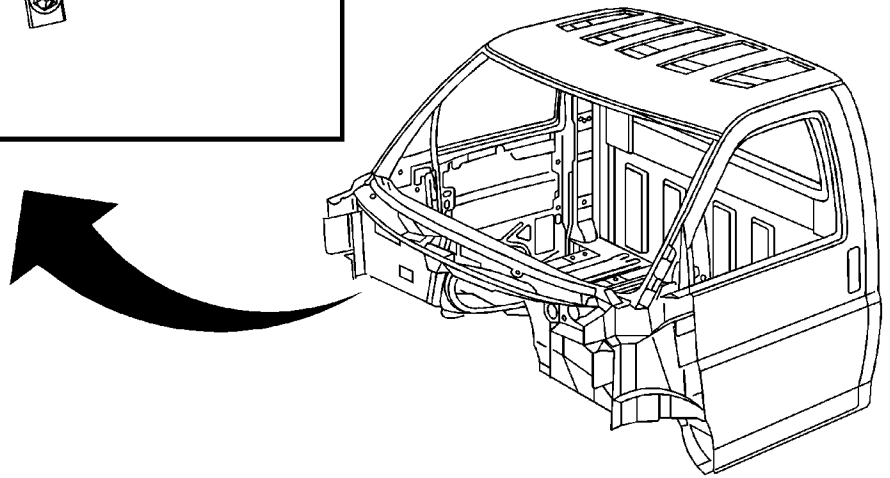
(LLY) Engine Control Module (ECM) – Connector C-3 (continued)

Pin	Wire Color	Circuit No.	Function
37	WH	121	Engine Speed Signal
38	—	—	Not Used
39	PU	2562	PTO Control
40	BN/WH	419	MIL Control
41	D-GN/WH	459	A/C Compressor Clutch Relay Control
42	—	—	Not Used
43	YE/BK	1868	Low Reference
44	BK/WH	351	Ground
45	L-GN	24	Backup Lamp Supply Voltage
46	—	—	Not Used
47	BN/WH	379	CPP Switch Signal (M/T)
48	BN	718	Low Reference
49-50	—	—	Not Used
51	BN/WH	633	CMP Sensor Signal
52	D-BU/WH	1869	CKP Sensor Signal
53-55	—	—	Not Used
56	RD	2013	High Idle Indicator Control

(LLY) Engine Control Module (ECM) Location



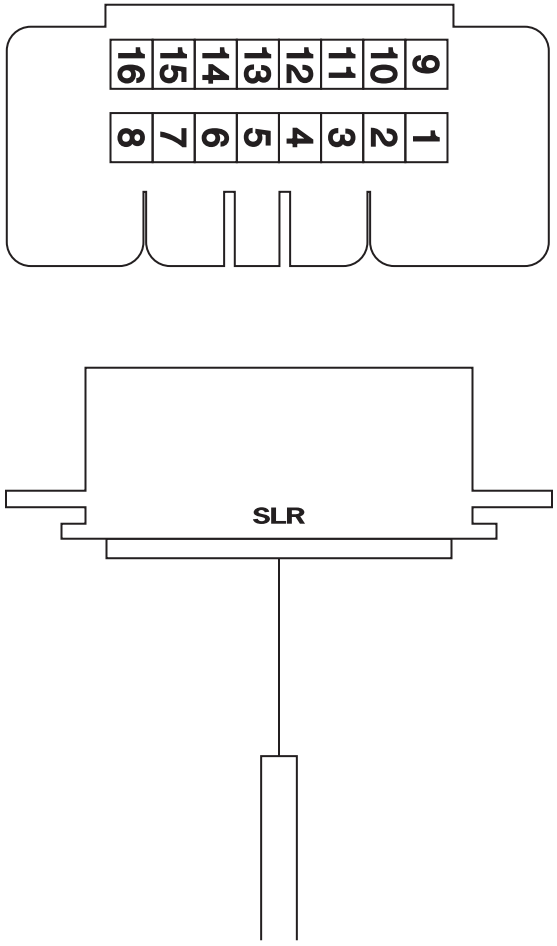


(1) Engine Control Module (ECM)
(2) Transmission Control Module (TCM)

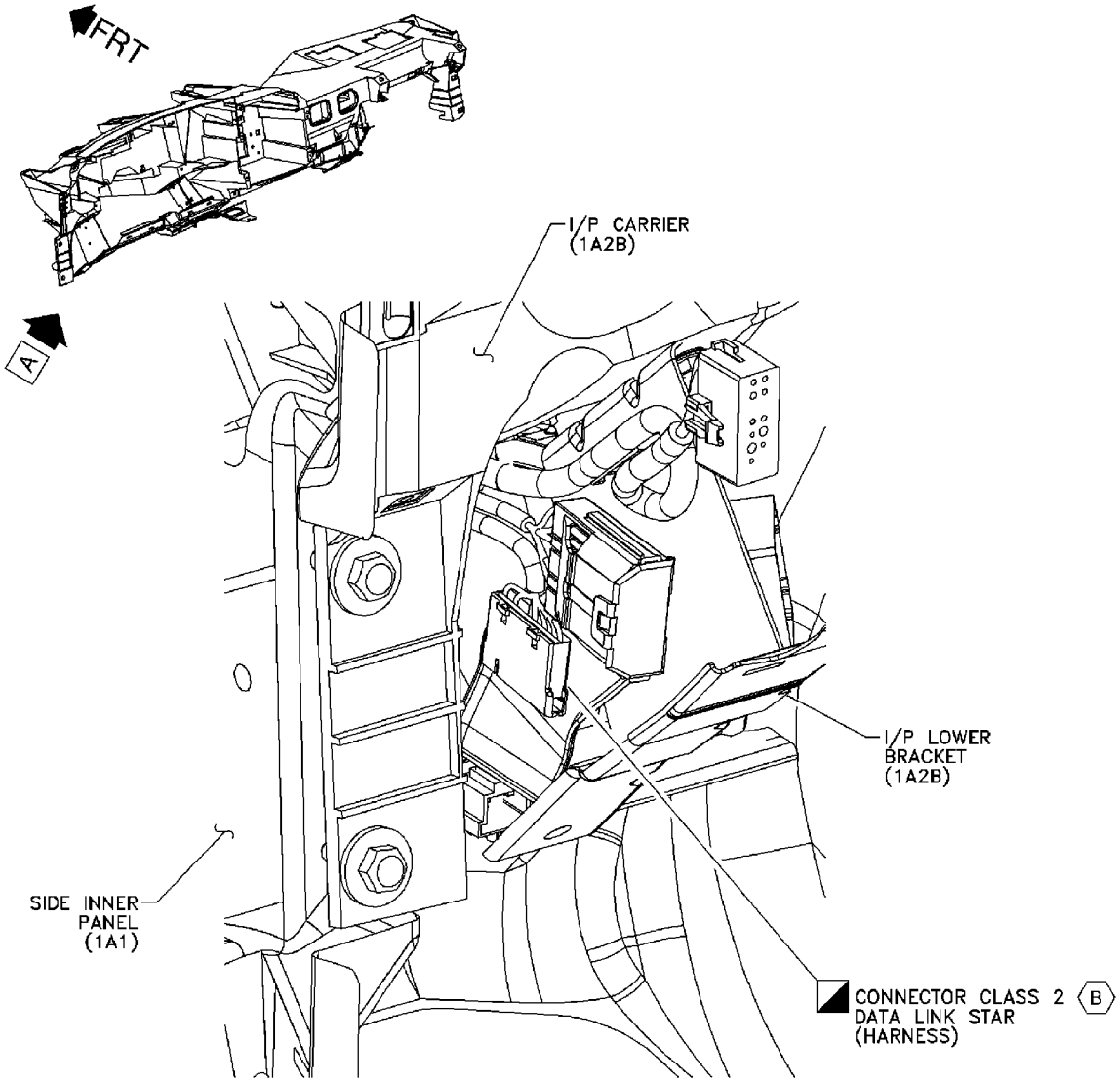
16-Way Serial Data Link Connector

Connector	Packard 150 MP Series
Typical connector	12110256
Typical terminal	12040993

Pin	Wire		Function
	Ckt #	Color	
1	—	—	Spare
2	1132	PPL	Right Park
3	—	—	Left Turn
4	750	BLK	Left Park
5	1451	BLK/WHT	Stop
6	—	—	Spare
7	1921	TAN/BLK	Spare
8	1455	BLK/WHT	Gnd Zone 3B
9	—	—	Spare
10	—	—	Spare
11	—	—	Spare
12	—	—	Spare
13	—	—	Spare
14	—	—	Spare
15	1922	WHT/BLK	DTC J1708 / J1587(-)
16	840	ORN	DLC Power



Serial Data Link Connector Location

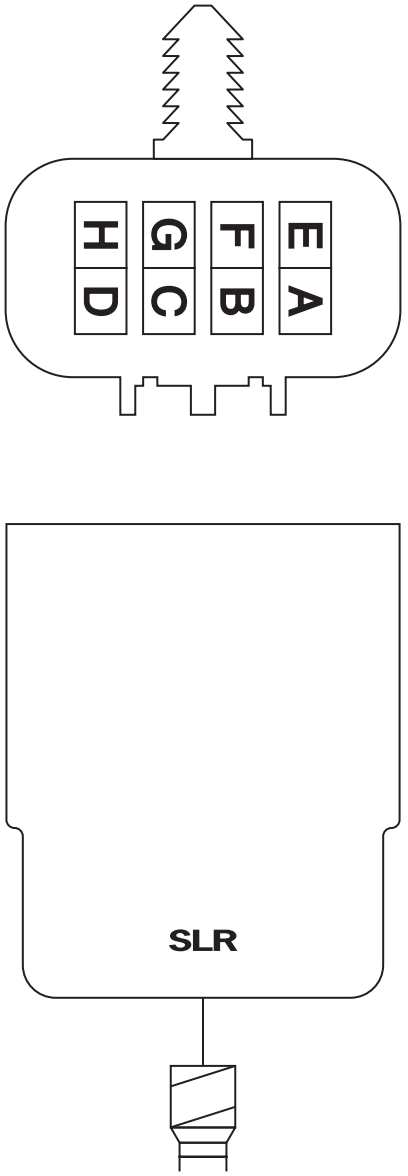


VIEW A

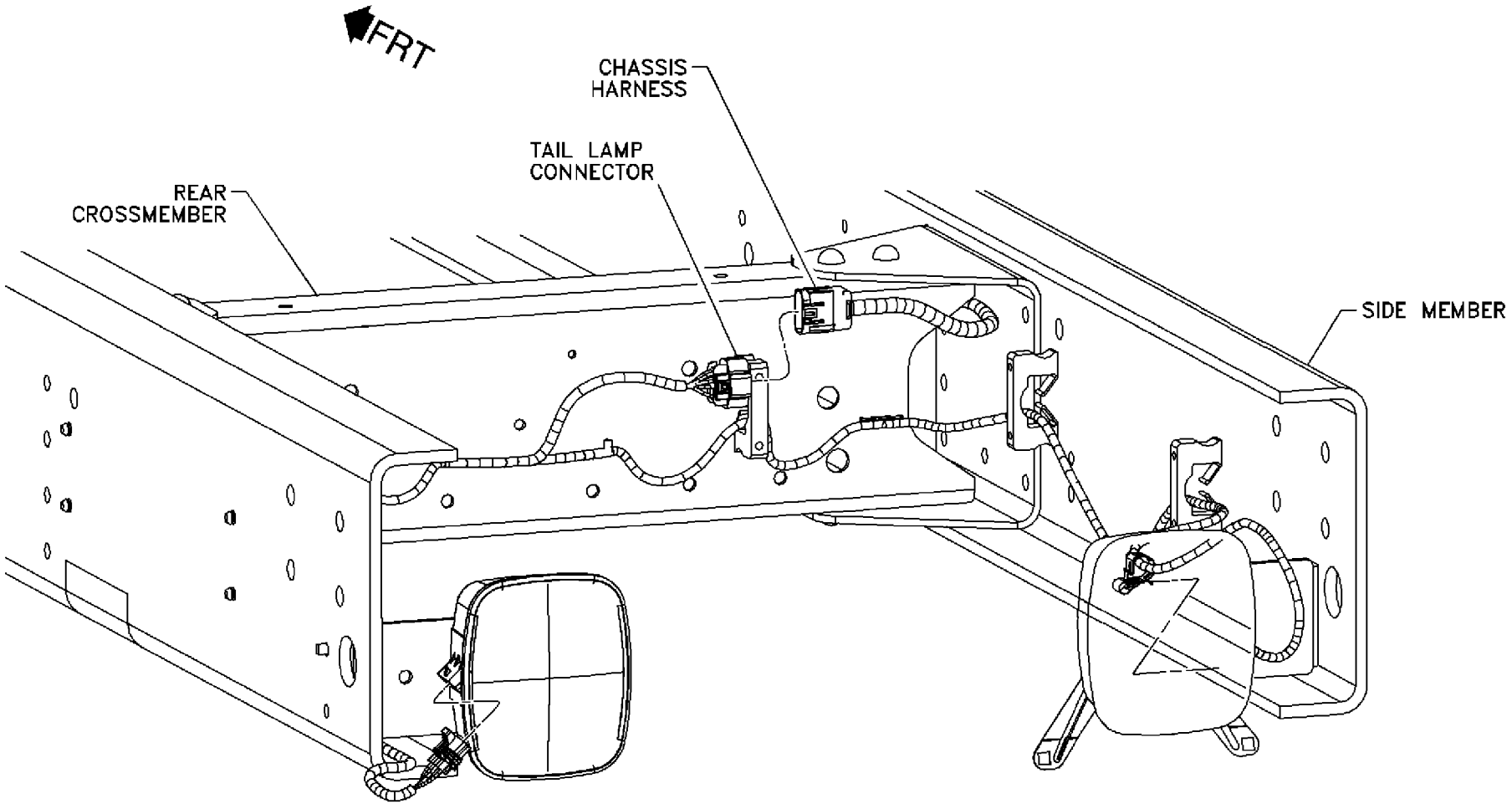
8-Way Tail Lamp Connector

	TRUCK SIDE	BODY BUILDER SIDE
Connector	Packard 280 Series	
Typical connector	15326906 (F)	15326655 (M)
Typical terminal	15304718	15304730
Typical cable seal	12191232	12191232

Pin	Wire		Function
	Ckt #	Color	
A	618	YEL	LR Stop/Turn
B	2609	BRN	Lt Tail / License
C	TBD	—	Spare
D	2609	BRN/WHT	RT Tail
E	619	GRN DK	RR Stop/Turn
F	24	GRN LT	Back Up
G	350	BLK	Gnd Zone 3B
H	TBD	—	Spare



Tail Lamp Connector Location

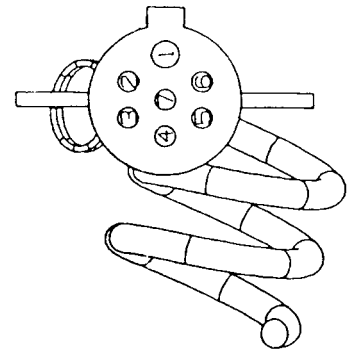


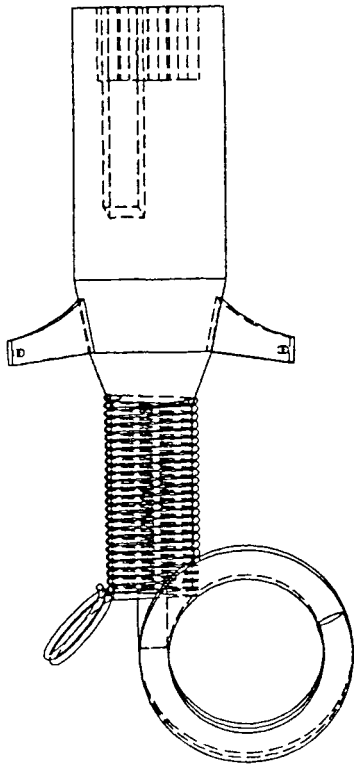
7-Way Tractor Connector – Family 3

Connector	Packard 280/630 Series
connector	12077629
terminal	15304720 3mm
seal	15366065 5mm
terminal	15326004 3mm
seal	12191235 5mm

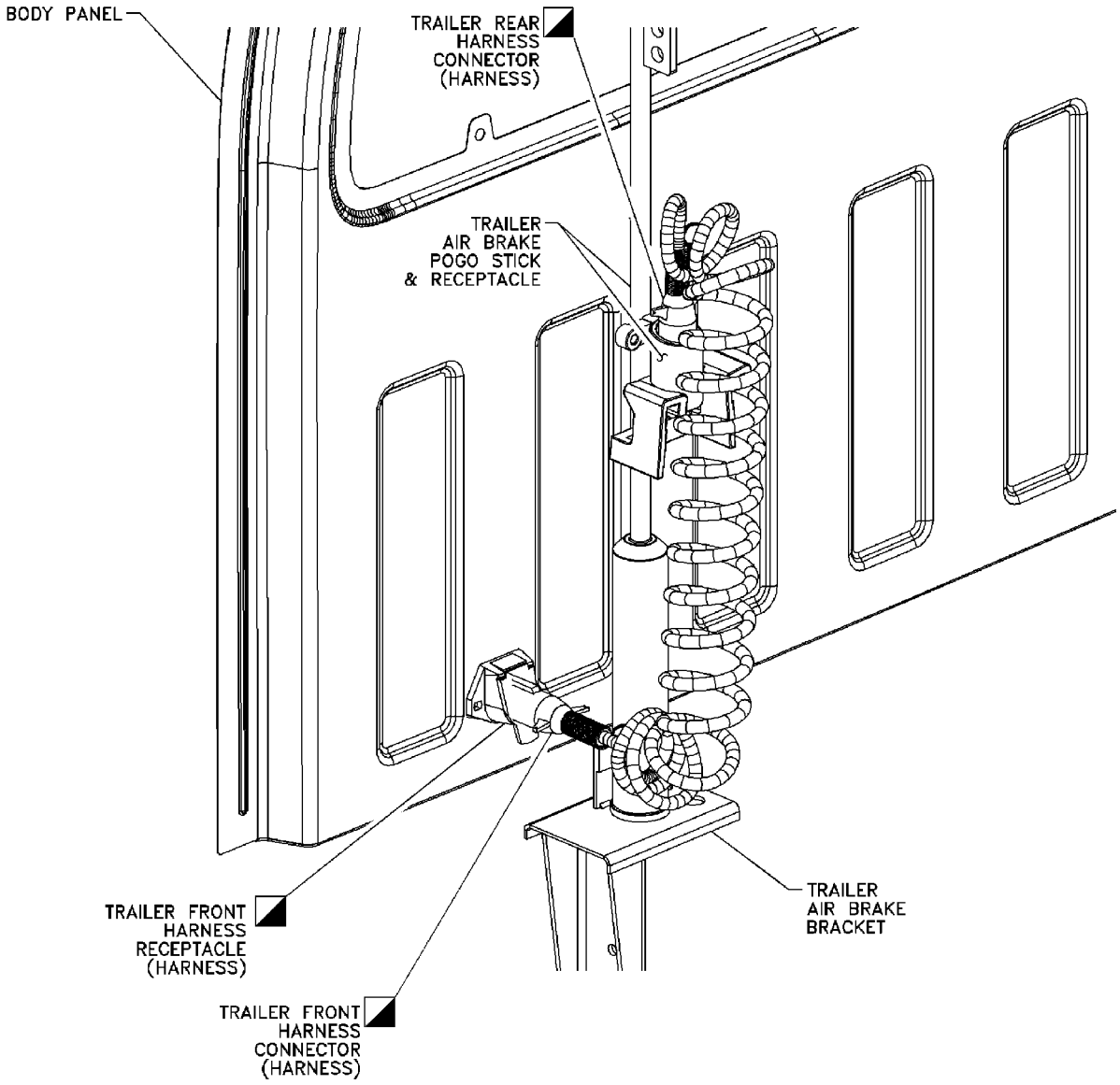
Pin	Wire		Function
	Ckt #	Color	
1	22	WHT	Tractor Gnd Zone 7B
2	1412	BLK	Marker Lamp
3	318	YEL	Lt Turn/Hazard
4	1411	RED	Brake (1)
5	319	GRN DK	Rt Turn/Hazard
6	9	BRN	Park Lamp
7	1413	BLU DK	ABS Power & Multiplexed Signal

NOTES:
(1) 30A maxi fuse. See page B-4.





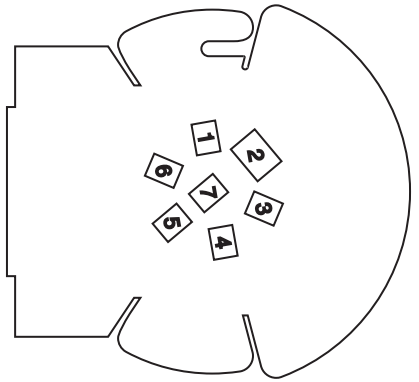
Tractor Connector – Family 3 Location

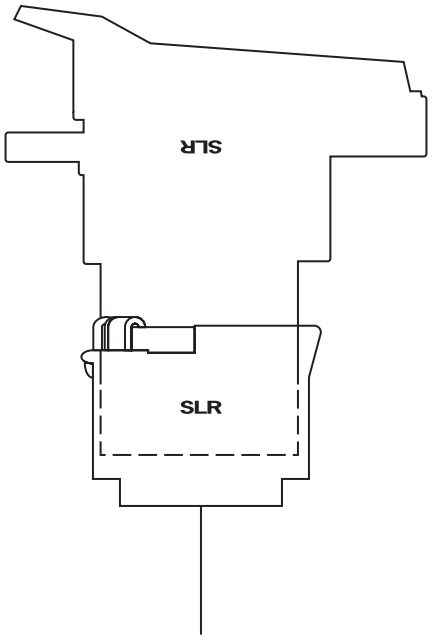

BODY PANEL
TRAILER REAR HARNESS CONNECTOR (HARNESS)
TRAILER AIR BRAKE POGO STICK & RECEPTACLE
TRAILER FRONT HARNESS RECEPTACLE (HARNESS)
TRAILER FRONT HARNESS CONNECTOR (HARNESS)
TRAILER AIR BRAKE BRACKET

7-Way Trailer Connector – Family 2

Connector	Packard 280/630 Series	
connector	15354653	
terminal	12119853	3mm
terminal	15317332	5mm
seal	12015323	

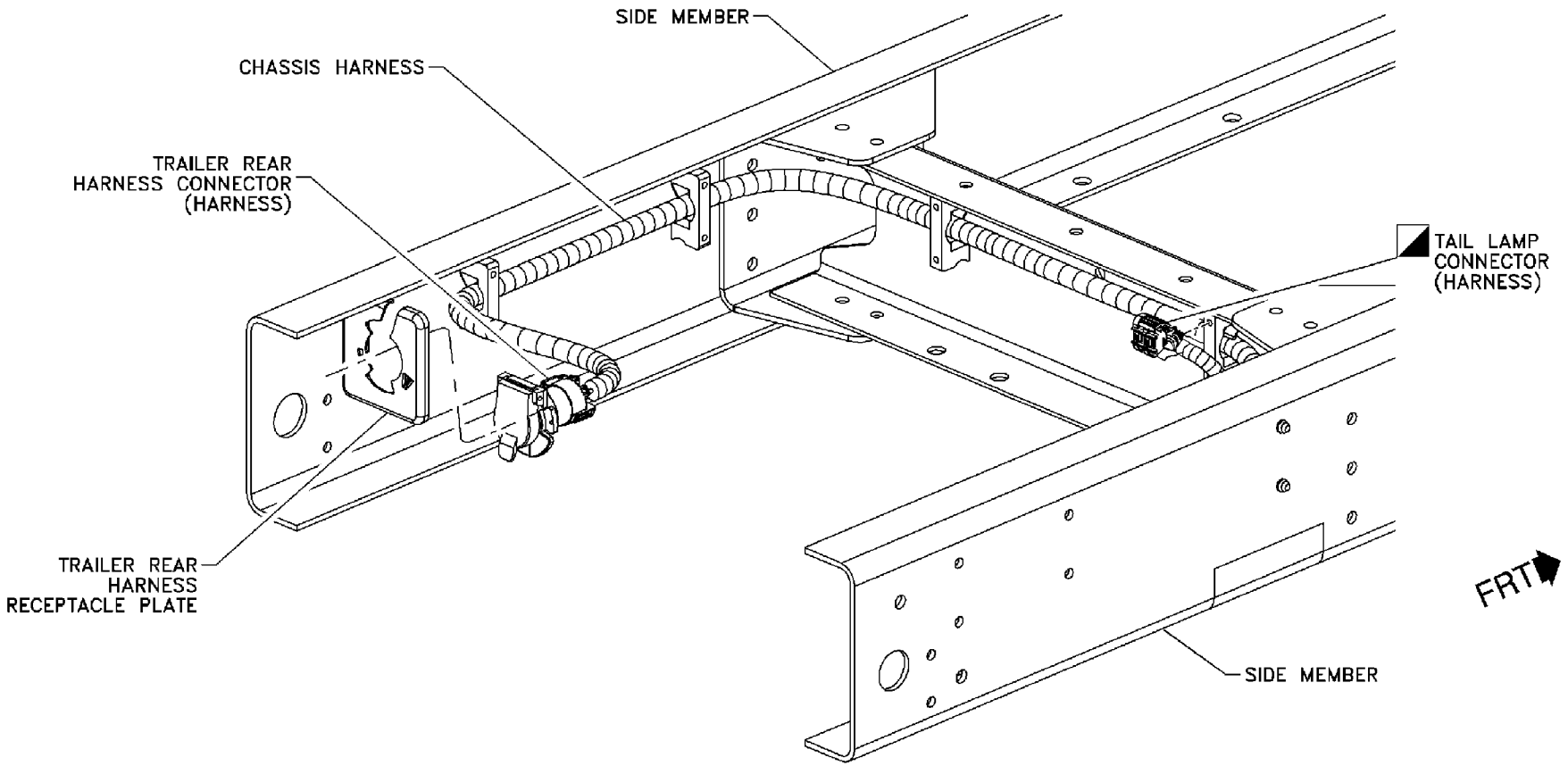
Pin		Wire		Function
		Ckt #	Color	
7	A	24	GRN LT	Back Up
2	B	22	WHT	Tractor Gnd Zone 12A
3	C	47	BLU DK	Aux Elec Brake (1)
4	D	319	GRN DK	Rt Turn/Hazard
5	E	642	RED	Electric Brake Power (2)
6	F	9	BRN	Park Lamp
1	G	318	YEL	Lt Turn/Hazard





NOTES:
(1) Blunt cut end found under hood. See UI Bulletin #66.
(2) 30A maxi fuse. See page B-4.

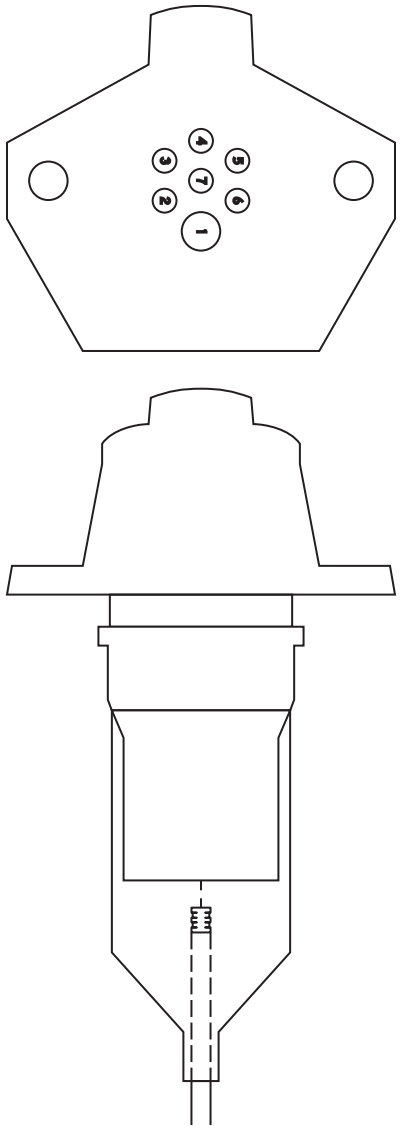
Trailer Connector – Family 2 Location



7-Way Trailer Connector – Family 3

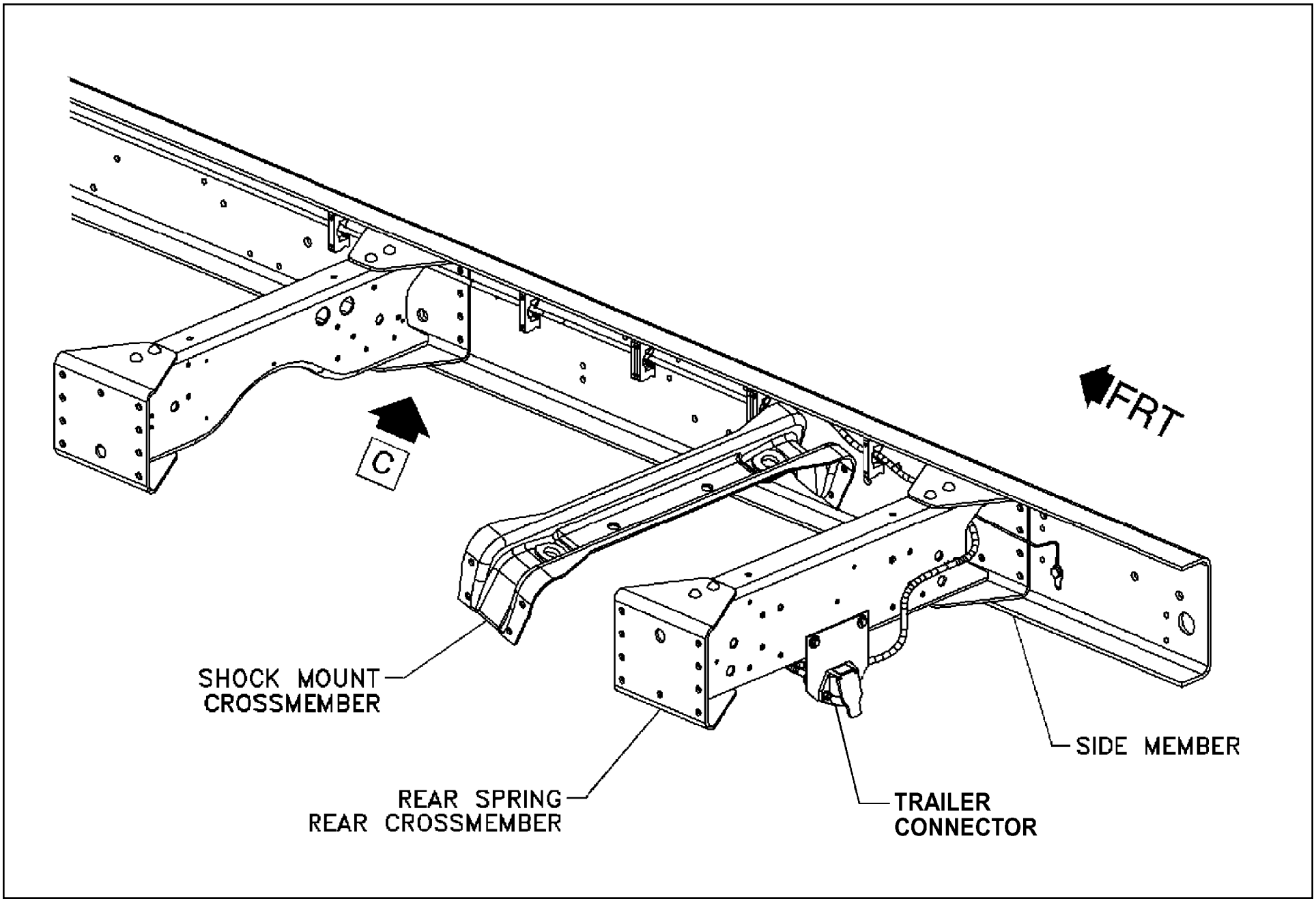
Connector	Packard 280/630 Series	
connector	12077629	
terminal	15304720	3mm
seal	15366065	5mm
terminal	15326004	3mm
seal	12191235	5mm

Pin	Wire		Function
	Ckt #	Color	
1	22	WHT	Tractor Gnd Zone 12B
2	1412	BLK	Marker Lamp
3	318	YEL	Lt Turn/Hazard
4	1411	RED	Brake (1)
5	319	GRN DK	Rt Turn/Hazard
6	9	BRN	Park Lamp
7	1413	BLU DK	ABS Power & Multiplexed Signal



NOTES:
(1) 30A maxi fuse. See page B-4.

Trailer Connector – Family 3 Location

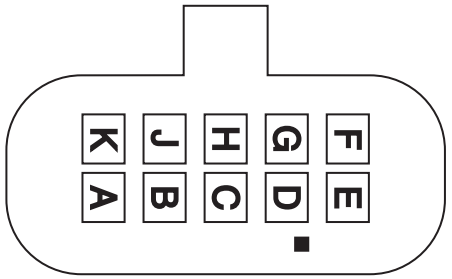


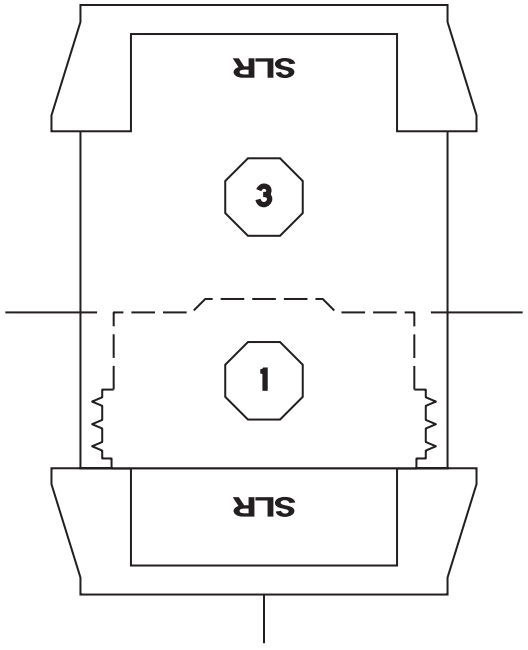
10-Way Transmission Optional Connector

	TRUCK SIDE	BODY BUILDER SIDE
Typical connector	12065425 (F)	12045808 (M)
Typical terminal	12048074	12177150
Typical cable seal	12048086	15324973

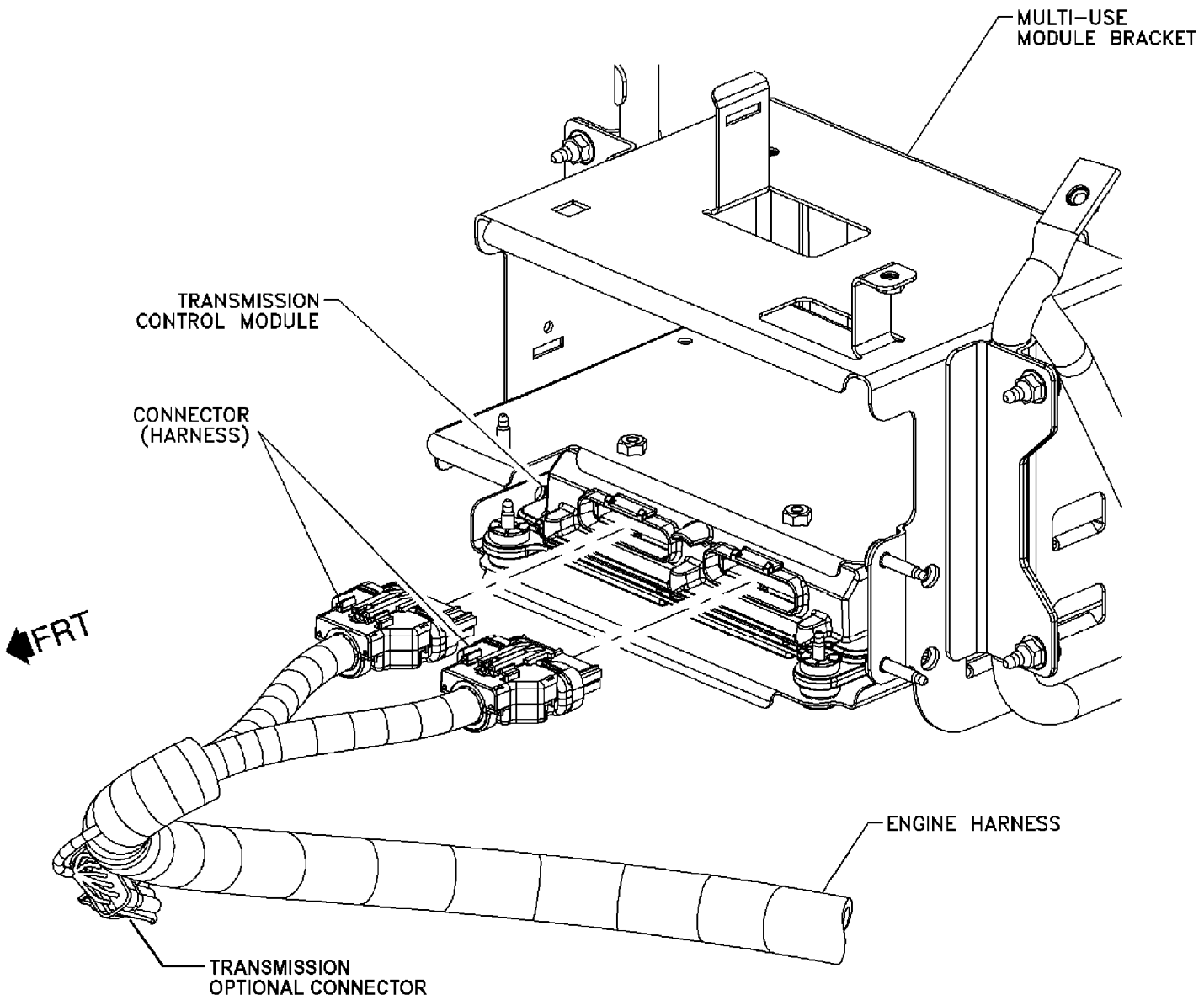
ALLISON LCT TRANS			
Pin	**Wire**		**Function**
	Ckt #	**Color**	
A	1146	PPL	Range Indicator
B	1479	YEL	Auto Neutral
C	2522	YEL	PTO Status
D	N/C	—	—
E	N/C	—	—
F	1147	TAN	Range Inhibit
G	N/C	—	—
H	407	BLK	Analog Gnd
J	476	BLK	Digital Gnd
K	1480	BLU LT	PTO Output

ALLISON MD TRANS			
A	1146	PPL	Range Indicator
B	1479	YEL	Auto Neutral
C	915	YEL	PTO Enable
D	1481	YEL	Aux Hold
E	1148	GRA	Sump Temp
F	1147	TAN	Range Inhibit
G	N/C	—	—
H	407	BLK	Analog Gnd
J	476	BLK	Digital Gnd
K	1480	BLU LT	PTO Engage





Transmission Optional Connector Location



10-Way Upfitter PTO Connector

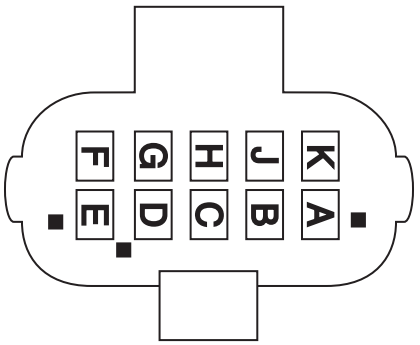
	TRUCK SIDE	BODY BUILDER SIDE
Typical connector	12177081 (F)	12045808 (M)
Typical terminal	15305038	12177150
Typical cable seal	15324976	15324976

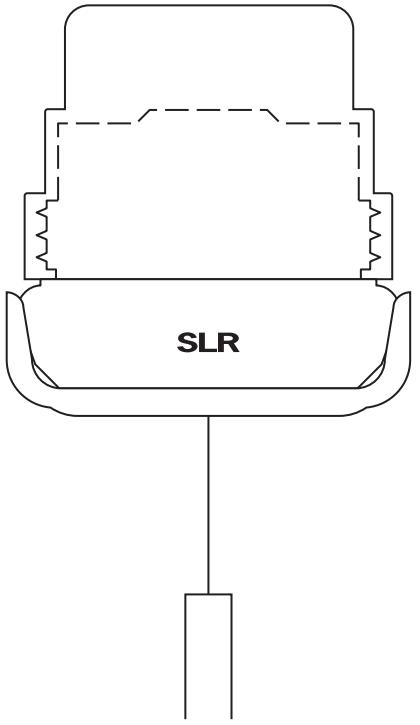
L18/LB7/LG4

Pin	Wire		Function
	Ckt #	Color	
A	N/C	—	—
B	494	BLU LT	PTO Kill
C	488	GRN LT	PTO Enable
D	250	BLK	GND
E	2663	PPL	Tap Up
F	488	GRN LT	PTO Enable
G	2522	YEL	PTO Feedback
H	2561	WHT	Engage
J	2664	TAN	Tap Down
K	N/C	—	—

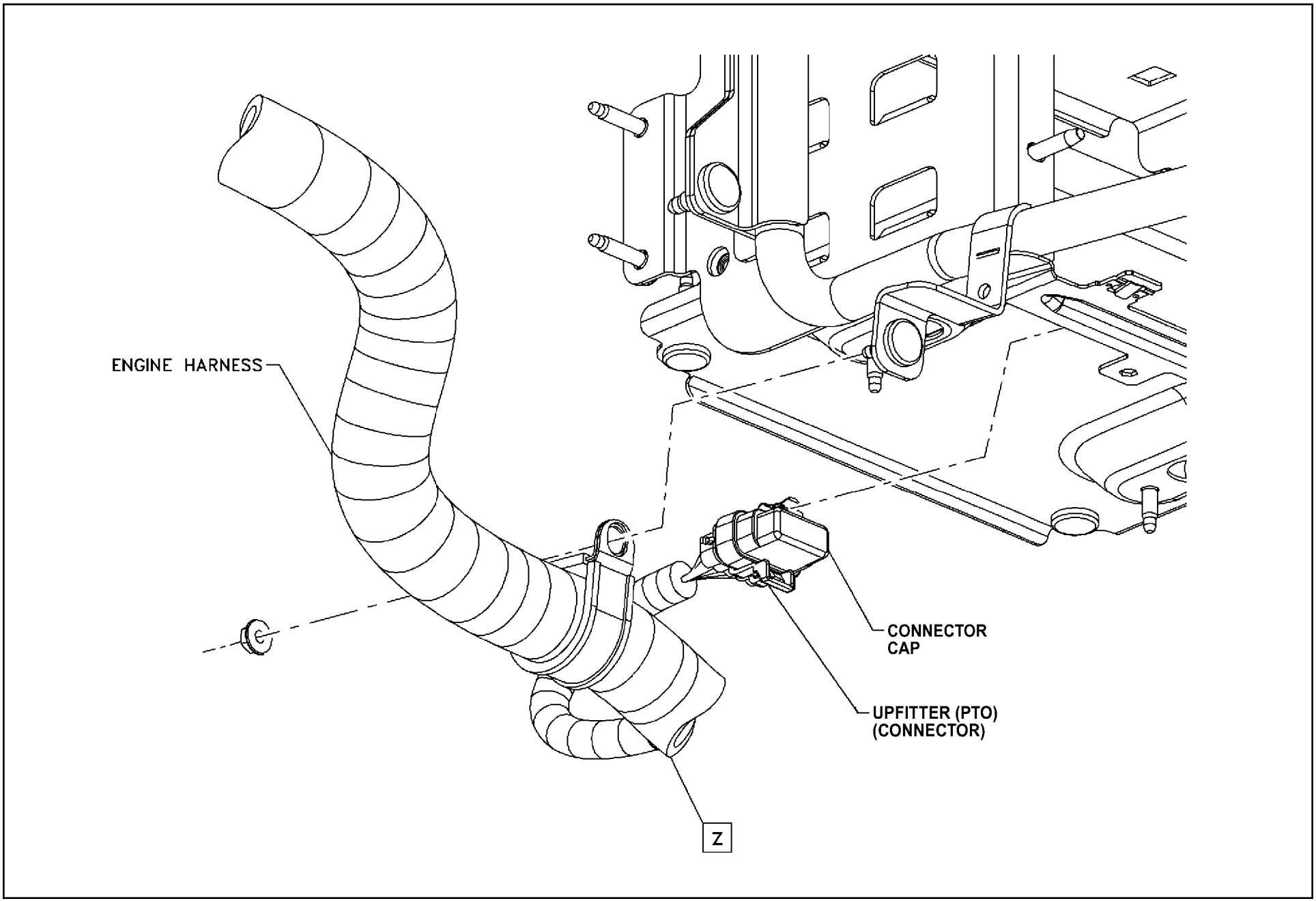
LG5

A	250	BLK	GND
B	494	BLU LT	PTO Kill Switch
C	2664	TAN	Tap Down
D	451	BLK/WHT	Engine GND
E	451	BLK/WHT	Engine GND
F	2663	PPL	Tap Up
G	2522	YEL	FEED BACK
H	2561	WHT	Engage
J	451	BLK/WHT	GND
K	N/C	—	—

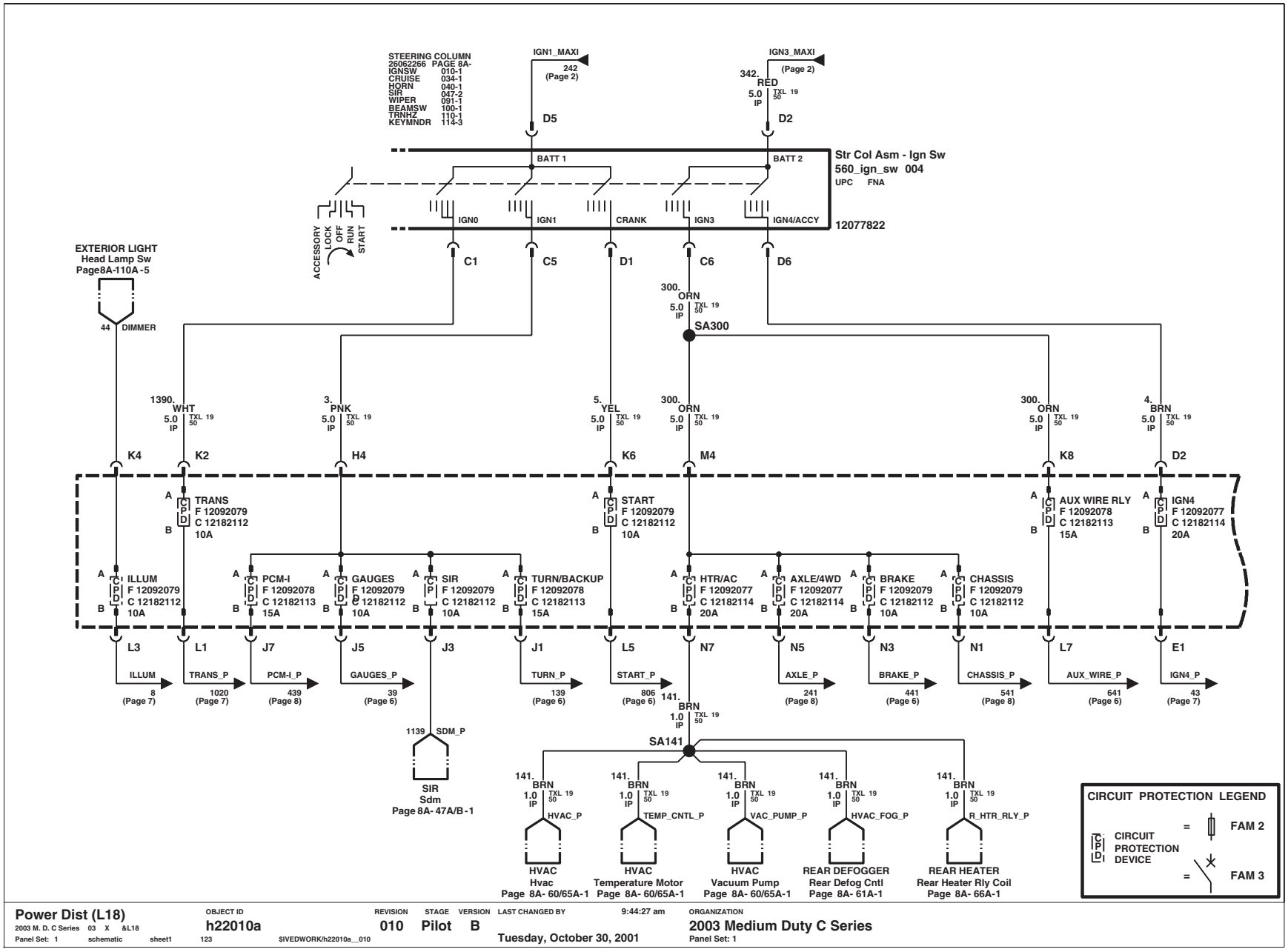




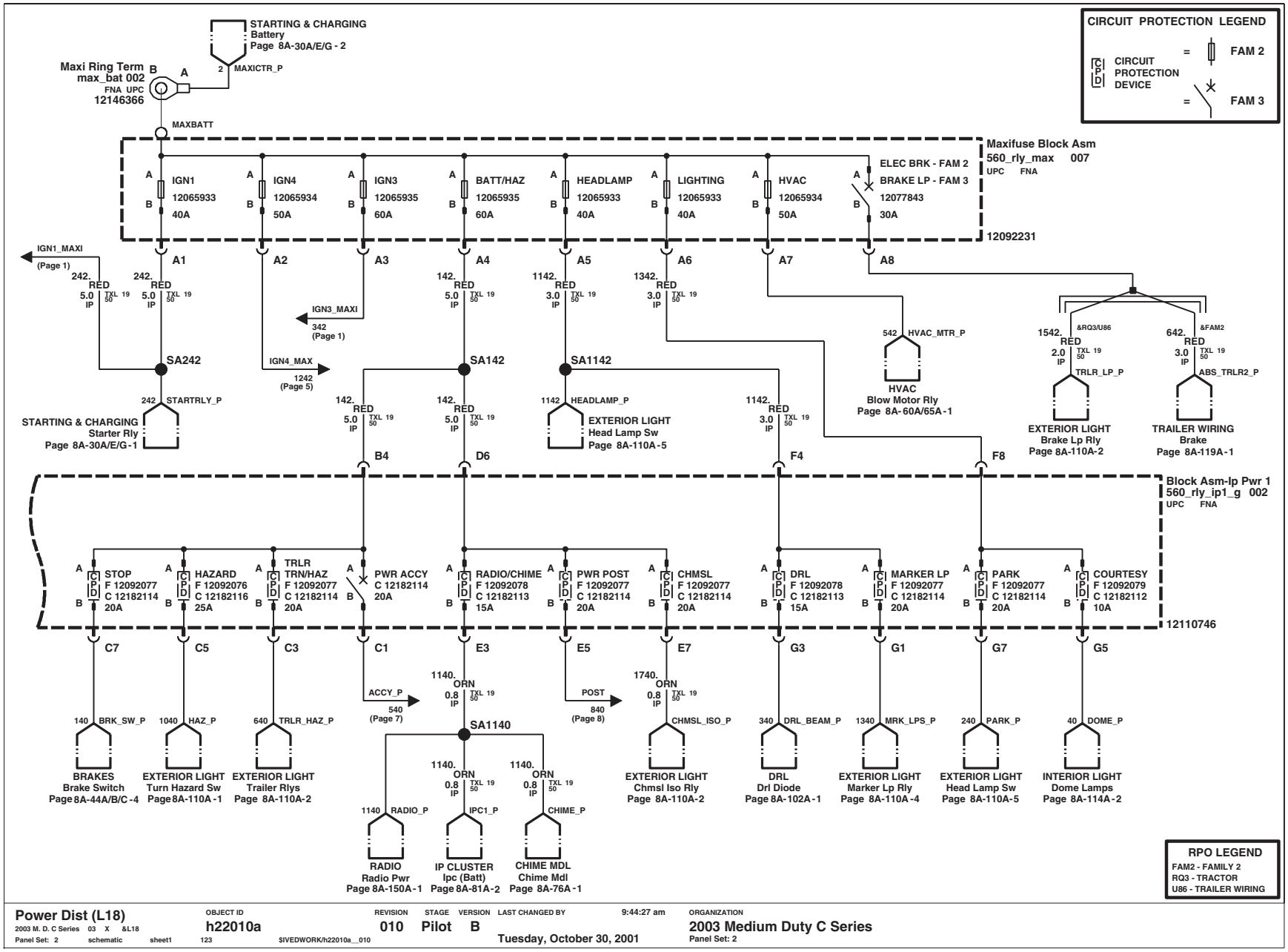
Upfitter PTO Connector Location



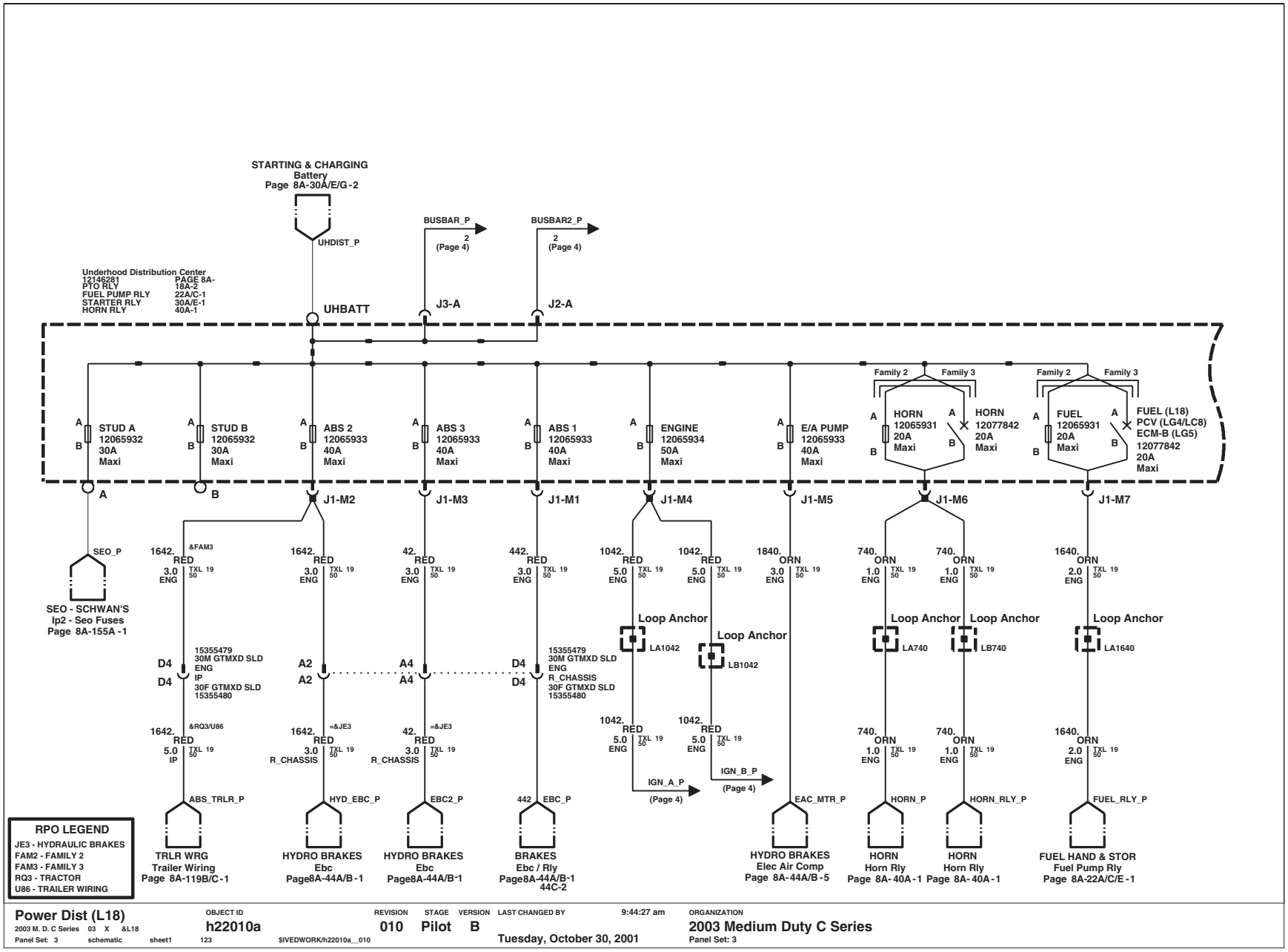
Power Distribution — (L18) 8.1L-Gas/NAPT



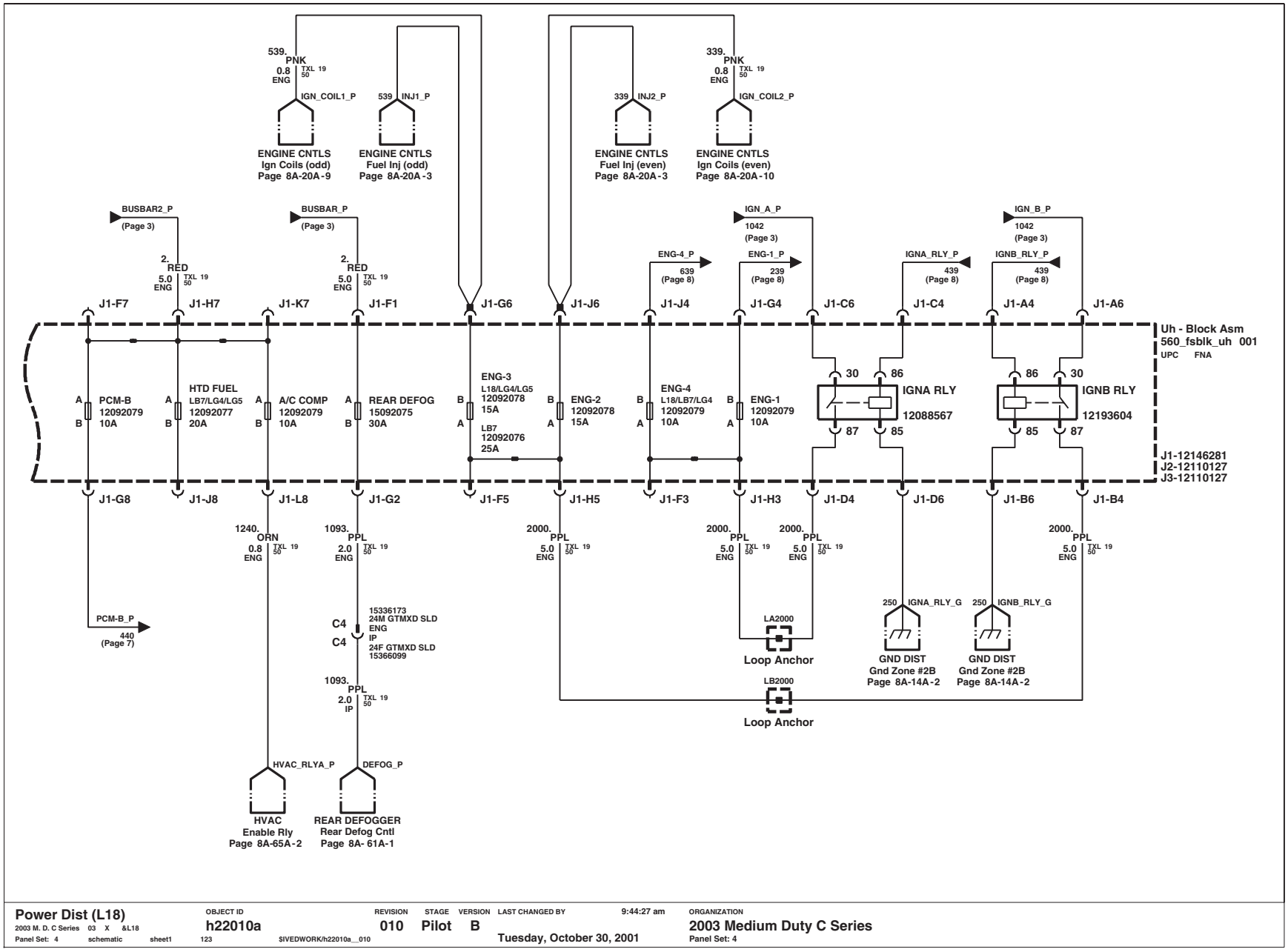
Power Distribution — (L18) 8.1L-Gas/NAPT


CIRCUIT PROTECTION LEGEND
CPD CIRCUIT PROTECTION DEVICE = FAM 2 = FAM 3
STARTING & CHARGING Battery Page 8A-30A/E/G - 2
Maxi Ring Term max_bat 002 FNA UPC 12146366
MAXICTR_P
MAXBATT
Maxifuse Block Asm 560_rly_max 007 UPC FNA
IGN1 12065933 40A
IGN4 12065934 50A
IGN3 12065935 60A
BATT/HAZ 12065935 60A
HEADLAMP 12065933 40A
LIGHTING 12065933 40A
HVAC 12065934 50A
ELEC BRK - FAM 2
BRAKE LP - FAM 3 12077843 30A
12092231
IGN1_MAXI (Page 1)
IGN3_MAXI 342 (Page 1)
IGN4_MAX 1242 (Page 5)
SA242
SA142
SA1142
STARTING & CHARGING Starter Rly Page 8A-30A/E/G-1
HVAC_MTR_P
HVAC Blow Motor Rly Page 8A-60A/65A-1
EXTERIOR LIGHT Head Lamp Sw Page 8A-110A-5
EXTERIOR LIGHT Brake Lp Rly Page 8A-110A-2
TRAILER WIRING Brake Page 8A-119A-1
Block Asm-Ip Pwr 1 560_rly_ip1_g 002 UPC FNA
STOP F 12092077 C 12182114 20A
HAZARD F 12092076 C 12182116 25A
TRLR TRN/HAZ F 12092077 C 12182114 20A
PWR ACCY C 12182114 20A
RADIO/CHIME F 12092078 C 12182113 15A
PWR POST F 12092077 C 12182114 20A
CHMSL F 12092077 C 12182114 20A
DRL F 12092078 C 12182113 15A
MARKER LP F 12092077 C 12182114 20A
PARK F 12092077 C 12182114 20A
COURTESY F 12092079 C 12182112 10A
12110746
BRAKES Brake Switch Page 8A-44A/B/C-4
EXTERIOR LIGHT Turn Hazard Sw Page 8A-110A-1
EXTERIOR LIGHT Trailer Rlys Page 8A-110A-2
SA1140
EXTERIOR LIGHT Chmsl Iso Rly Page 8A-110A-2
DRL Drl Diode Page 8A-102A-1
EXTERIOR LIGHT Marker Lp Rly Page 8A-110A-4
EXTERIOR LIGHT Head Lamp Sw Page 8A-110A-5
INTERIOR LIGHT Dome Lamps Page 8A-114A-2
RADIO Radio Pwr Page 8A-150A-1
IP CLUSTER Ipc (Batt) Page 8A-81A-2
CHIME MDL Chime Mdl Page 8A-76A-1
RPO LEGEND
FAM2 - FAMILY 2
RQ3 - TRACTOR
U86 - TRAILER WIRING
Power Dist (L18)
2003 M. D. C Series 03 X &L18
Panel Set: 2 schematic sheet1 123
OBJECT ID h22010a
$IVEDWORK/h22010a__010
REVISION 010
STAGE Pilot
VERSION B
LAST CHANGED BY
9:44:27 am
Tuesday, October 30, 2001
ORGANIZATION 2003 Medium Duty C Series
Panel Set: 2

Power Distribution — (L18) 8.1L-Gas/NAPT

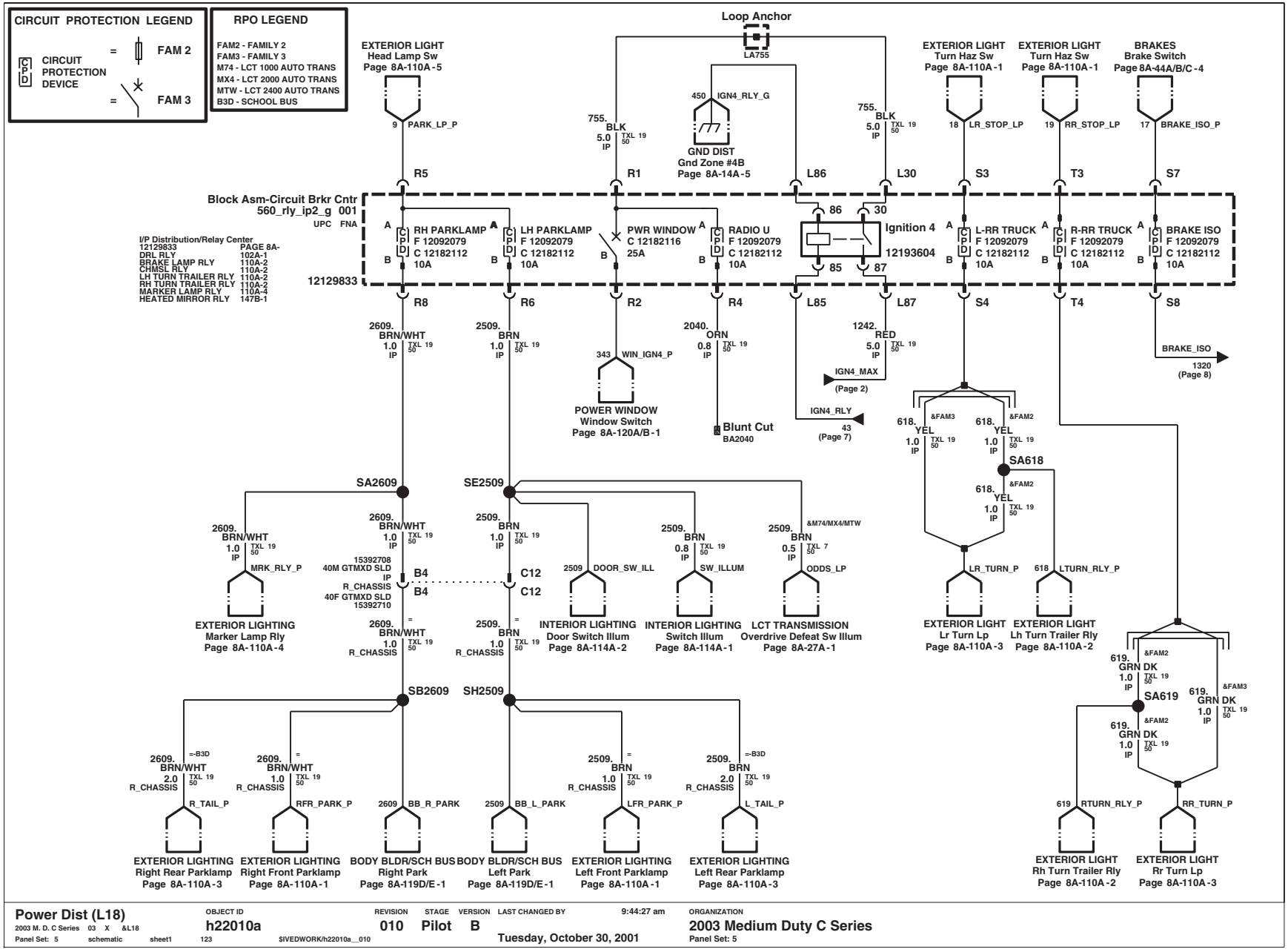


Power Distribution — (L18) 8.1L-Gas/NAPT

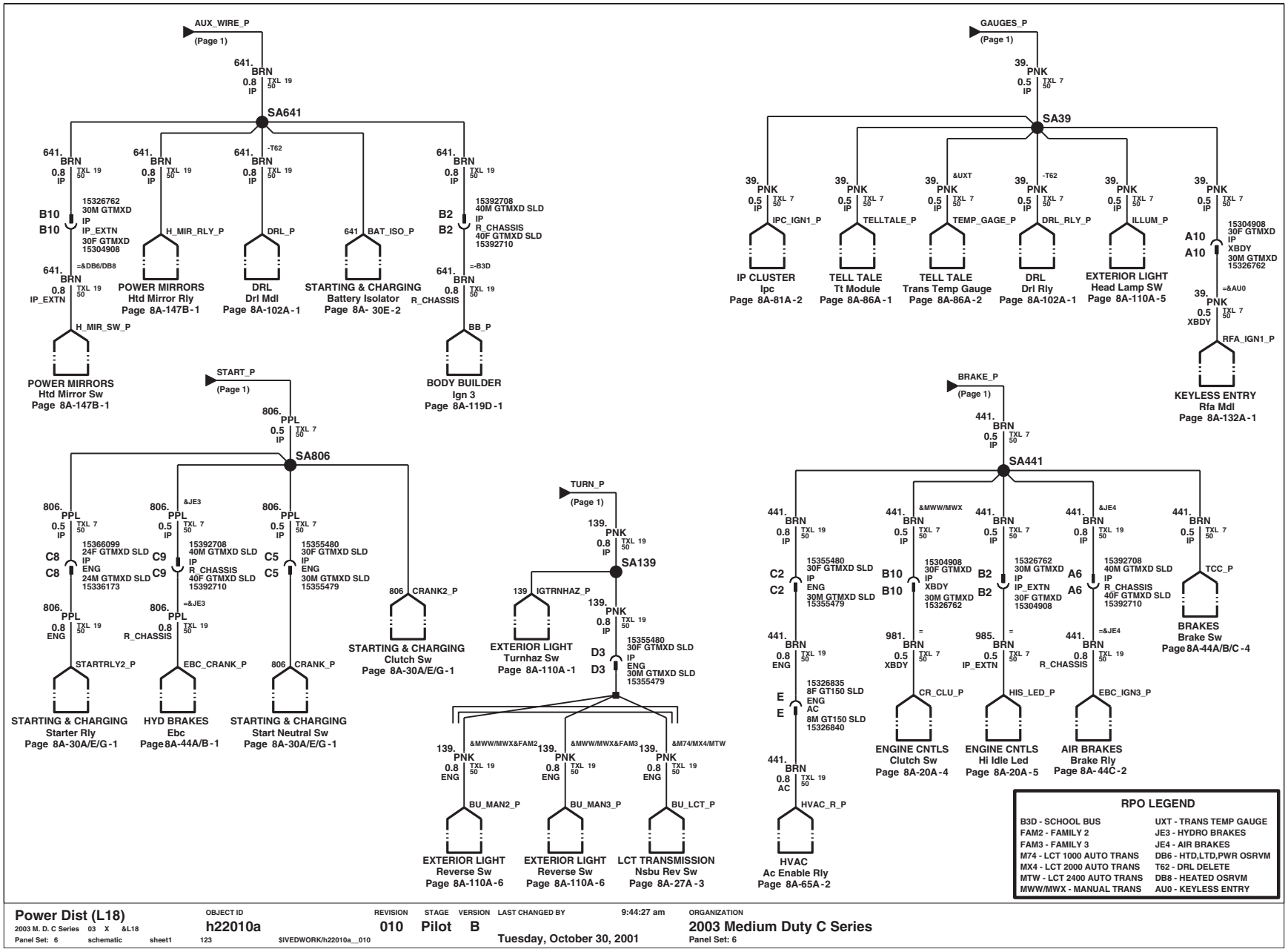

539. PNK 0.8 ENG TXL 19 50
IGN_COIL1_P
539 INJ1_P
ENGINE CNTLS Ign Coils (odd) Page 8A-20A-9
ENGINE CNTLS Fuel Inj (odd) Page 8A-20A-3
339 INJ2_P
339. PNK 0.8 ENG TXL 19 50
IGN_COIL2_P
ENGINE CNTLS Fuel Inj (even) Page 8A-20A-3
ENGINE CNTLS Ign Coils (even) Page 8A-20A-10
BUSBAR2_P (Page 3)
BUSBAR_P (Page 3)
2. RED 5.0 ENG TXL 19 50
IGN_A_P 1042 (Page 3)
IGN_B_P 1042 (Page 3)
ENG-4_P 639 (Page 8)
ENG-1_P 239 (Page 8)
IGNA_RLY_P 439 (Page 8)
IGNB_RLY_P 439 (Page 8)
J1-F7 J1-H7 J1-K7 J1-F1 J1-G6 J1-J6 J1-J4 J1-G4 J1-C6 J1-C4 J1-A4 J1-A6
Uh - Block Asm 560_fsblk_uh 001 UPC FNA
PCM-B 12092079 10A
HTD FUEL LB7/LG4/LG5 12092077 20A
A/C COMP 12092079 10A
REAR DEFOG 15092075 30A
ENG-3 L18/LG4/LG5 12092078 15A
LB7 12092076 25A
ENG-2 12092078 15A
ENG-4 L18/LB7/LG4 12092079 10A
ENG-1 12092079 10A
30 86 IGNA RLY 87 85 12088567
86 30 IGNB RLY 85 87 12193604
J1-12146281
J2-12110127
J3-12110127
J1-G8 J1-J8 J1-L8 J1-G2 J1-F5 J1-H5 J1-F3 J1-H3 J1-D4 J1-D6 J1-B6 J1-B4
1240. ORN 0.8 ENG TXL 19 50
1093. PPL 2.0 ENG TXL 19 50
2000. PPL 5.0 ENG TXL 19 50
PCM-B_P 440 (Page 7)
C4 15336173 24M GTMXD SLD ENG
C4 IP 24F GTMXD SLD 15366099
1093. PPL 2.0 IP TXL 19 50
LA2000
Loop Anchor
LB2000
Loop Anchor
250 IGNA_RLY_G
250 IGNB_RLY_G
GND DIST Gnd Zone #2B Page 8A-14A-2
GND DIST Gnd Zone #2B Page 8A-14A-2
HVAC_RLYA_P
DEFOG_P
HVAC Enable Rly Page 8A-65A-2
REAR DEFOGGER Rear Defog Cntl Page 8A-61A-1

Power Dist (L18)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X &L18	h22010a	010	Pilot	B		9:44:27 am	2003 Medium Duty C Series
Panel Set: 4 schematic sheet1 123	$IVEDWORK/h22010a__010				Tuesday, October 30, 2001		Panel Set: 4

Power Distribution — (L18) 8.1L-Gas/NAPT



Power Distribution — (L18) 8.1L-Gas/NAPT


AUX_WIRE_P
(Page 1)
641. BRN 0.8 IP TXL 19 50
SA641
641. BRN 0.8 IP TXL 19 50
B10 B10
15326762 30M GTMXD IP IP_EXTN 30F GTMXD 15304908
=&DB6/DB8
641. BRN 0.8 IP_EXTN TXL 19 50
H_MIR_SW_P
POWER MIRRORS Htd Mirror Sw Page 8A-147B-1
641. BRN 0.8 IP TXL 19 50
H_MIR_RLY_P
POWER MIRRORS Htd Mirror Rly Page 8A-147B-1
641. BRN 0.8 IP TXL 19 50
-T62
DRL_P
DRL Drl Mdl Page 8A-102A-1
641 BAT_ISO_P
STARTING & CHARGING Battery Isolator Page 8A- 30E-2
641. BRN 0.8 IP TXL 19 50
B2 B2
15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
=-B3D
641. BRN 0.8 R_CHASSIS TXL 19 50
BB_P
BODY BUILDER Ign 3 Page 8A-119D-1
START_P
(Page 1)
806. PPL 0.5 IP TXL 7 50
SA806
806. PPL 0.5 IP TXL 7 50
C8 C8
15366099 24F GTMXD SLD IP ENG 24M GTMXD SLD 15336173
806. PPL 0.8 ENG TXL 19 50
STARTRLY2_P
STARTING & CHARGING Starter Rly Page 8A-30A/E/G-1
&JE3
806. PPL 0.5 IP TXL 7 50
C9 C9
15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
=&JE3
806. PPL 0.8 R_CHASSIS TXL 19 50
EBC_CRANK_P
HYD BRAKES Ebc Page 8A-44A/B-1
806. PPL 0.5 IP TXL 7 50
C5 C5
15355480 30F GTMXD SLD IP ENG 30M GTMXD SLD 15355479
806 CRANK_P
STARTING & CHARGING Start Neutral Sw Page 8A-30A/E/G-1
806 CRANK2_P
STARTING & CHARGING Clutch Sw Page 8A-30A/E/G-1
TURN_P
(Page 1)
139. PNK 0.8 IP TXL 19 50
SA139
139 IGTRNHAZ_P
EXTERIOR LIGHT Turnhaz Sw Page 8A-110A-1
139. PNK 0.8 IP TXL 19 50
D3 D3
15355480 30F GTMXD SLD IP ENG 30M GTMXD SLD 15355479
&MWW/MWX&FAM2
139. PNK 0.8 ENG TXL 19 50
BU_MAN2_P
EXTERIOR LIGHT Reverse Sw Page 8A-110A-6
&MWW/MWX&FAM3
139. PNK 0.8 ENG TXL 19 50
BU_MAN3_P
EXTERIOR LIGHT Reverse Sw Page 8A-110A-6
&M74/MX4/MTW
139. PNK 0.8 ENG TXL 19 50
BU_LCT_P
LCT TRANSMISSION Nsbu Rev Sw Page 8A-27A-3
GAUGES_P
(Page 1)
39. PNK 0.5 IP TXL 7 50
SA39
39. PNK 0.5 IP TXL 7 50
IPC_IGN1_P
IP CLUSTER Ipc Page 8A-81A-2
39. PNK 0.5 IP TXL 7 50
TELLTALE_P
TELL TALE Tt Module Page 8A-86A-1
&UXT
39. PNK 0.5 IP TXL 7 50
TEMP_GAGE_P
TELL TALE Trans Temp Gauge Page 8A-86A-2
-T62
39. PNK 0.5 IP TXL 7 50
DRL_RLY_P
DRL Drl Rly Page 8A-102A-1
39. PNK 0.5 IP TXL 7 50
ILLUM_P
EXTERIOR LIGHT Head Lamp SW Page 8A-110A-5
39. PNK 0.5 IP TXL 7 50
A10 A10
15304908 30F GTMXD IP XBDY 30M GTMXD 15326762
=&AU0
39. PNK 0.5 XBDY TXL 7 50
RFA_IGN1_P
KEYLESS ENTRY Rfa Mdl Page 8A-132A-1
BRAKE_P
(Page 1)
441. BRN 0.5 IP TXL 7 50
SA441
441. BRN 0.8 IP TXL 19 50
C2 C2
15355480 30F GTMXD SLD IP ENG 30M GTMXD SLD 15355479
441. BRN 0.8 ENG TXL 19 50
E E
15326835 6F GT150 SLD ENG AC 8M GT150 SLD 15326840
441. BRN 0.8 AC TXL 19 50
HVAC_R_P
HVAC Ac Enable Rly Page 8A-65A-2
&MWW/MWX
441. BRN 0.5 IP TXL 7 50
B10 B10
15304908 30F GTMXD IP XBDY 30M GTMXD 15326762
981. BRN 0.5 XBDY TXL 7 50
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CR_CLU_P
ENGINE CNTLS Clutch Sw Page 8A-20A-4
441. BRN 0.5 IP TXL 7 50
B2 B2
15326762 30M GTMXD IP IP_EXTN 30F GTMXD 15304908
985. BRN 0.5 IP_EXTN TXL 7 50
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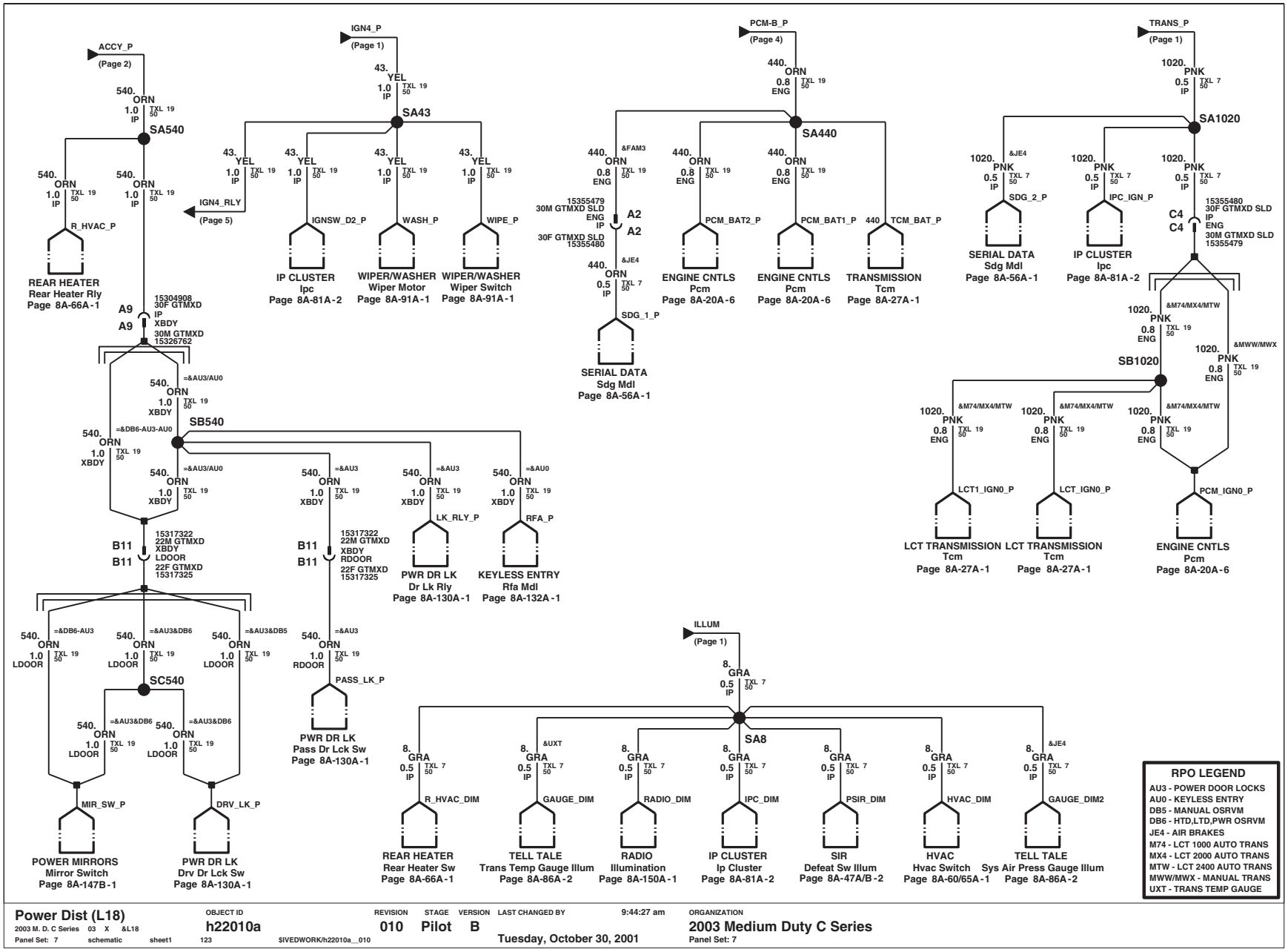
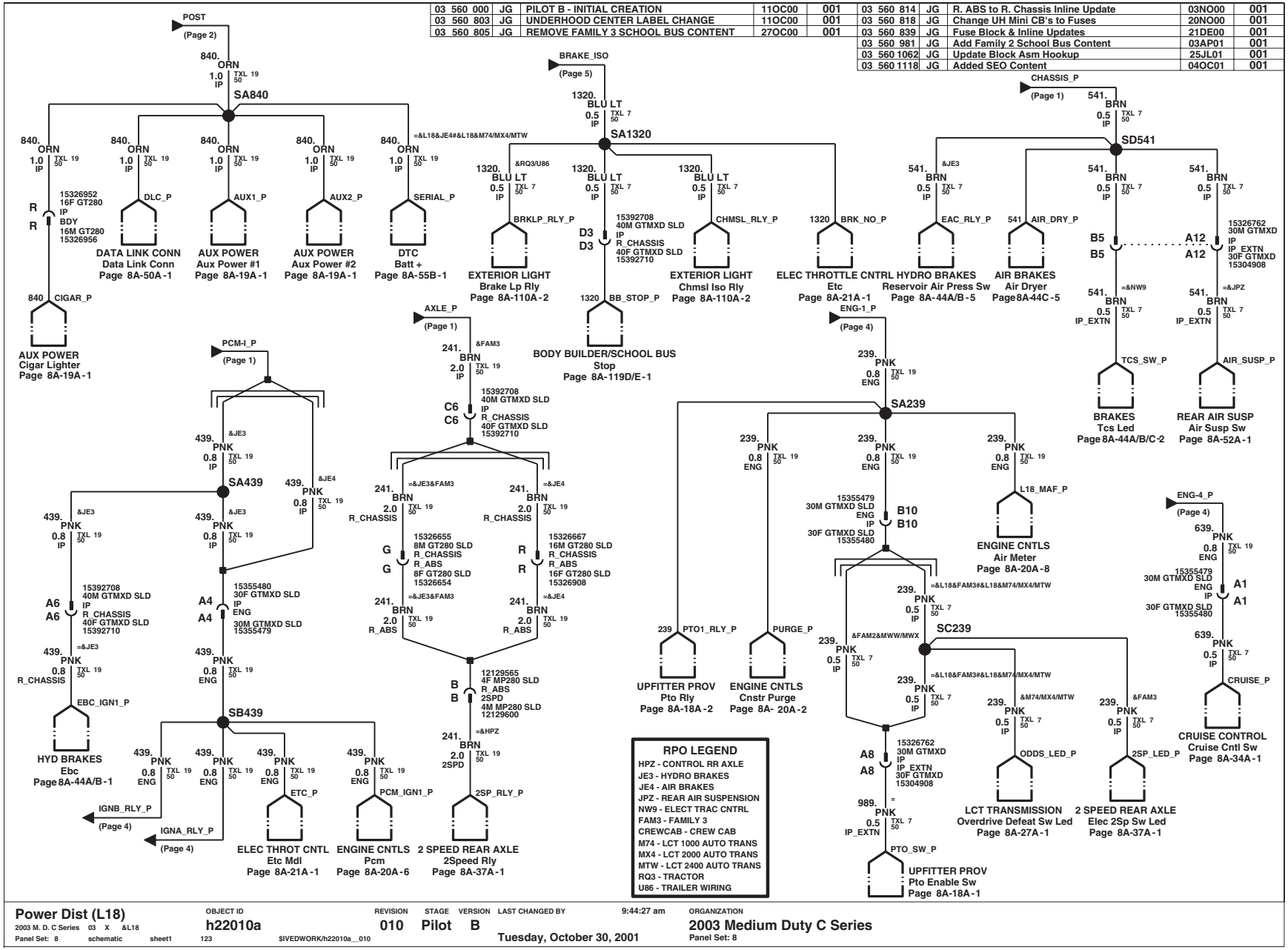
HIS_LED_P
ENGINE CNTLS Hi Idle Led Page 8A-20A-5
&JE4
441. BRN 0.8 IP TXL 19 50
A6 A6
15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
441. BRN 0.8 R_CHASSIS TXL 19 50
=&JE4
EBC_IGN3_P
AIR BRAKES Brake Rly Page 8A-44C-2
441. BRN 0.5 IP TXL 7 50
TCC_P
BRAKES Brake Sw Page 8A-44A/B/C-4
RPO LEGEND
B3D - SCHOOL BUS
FAM2 - FAMILY 2
FAM3 - FAMILY 3
M74 - LCT 1000 AUTO TRANS
MX4 - LCT 2000 AUTO TRANS
MTW - LCT 2400 AUTO TRANS
MWW/MWX - MANUAL TRANS
UXT - TRANS TEMP GAUGE
JE3 - HYDRO BRAKES
JE4 - AIR BRAKES
DB6 - HTD,LTD,PWR OSRVM
T62 - DRL DELETE
DB8 - HEATED OSRVM
AU0 - KEYLESS ENTRY
Power Dist (L18)
2003 M. D. C Series 03 X &L18
Panel Set: 6 schematic sheet1 123
OBJECT ID h22010a
$IVEDWORK/h22010a__010
REVISION 010
STAGE Pilot
VERSION B
LAST CHANGED BY
Tuesday, October 30, 2001
9:44:27 am
ORGANIZATION 2003 Medium Duty C Series
Panel Set: 6

Power Distribution — (L18) 8.1L-Gas/NAPT

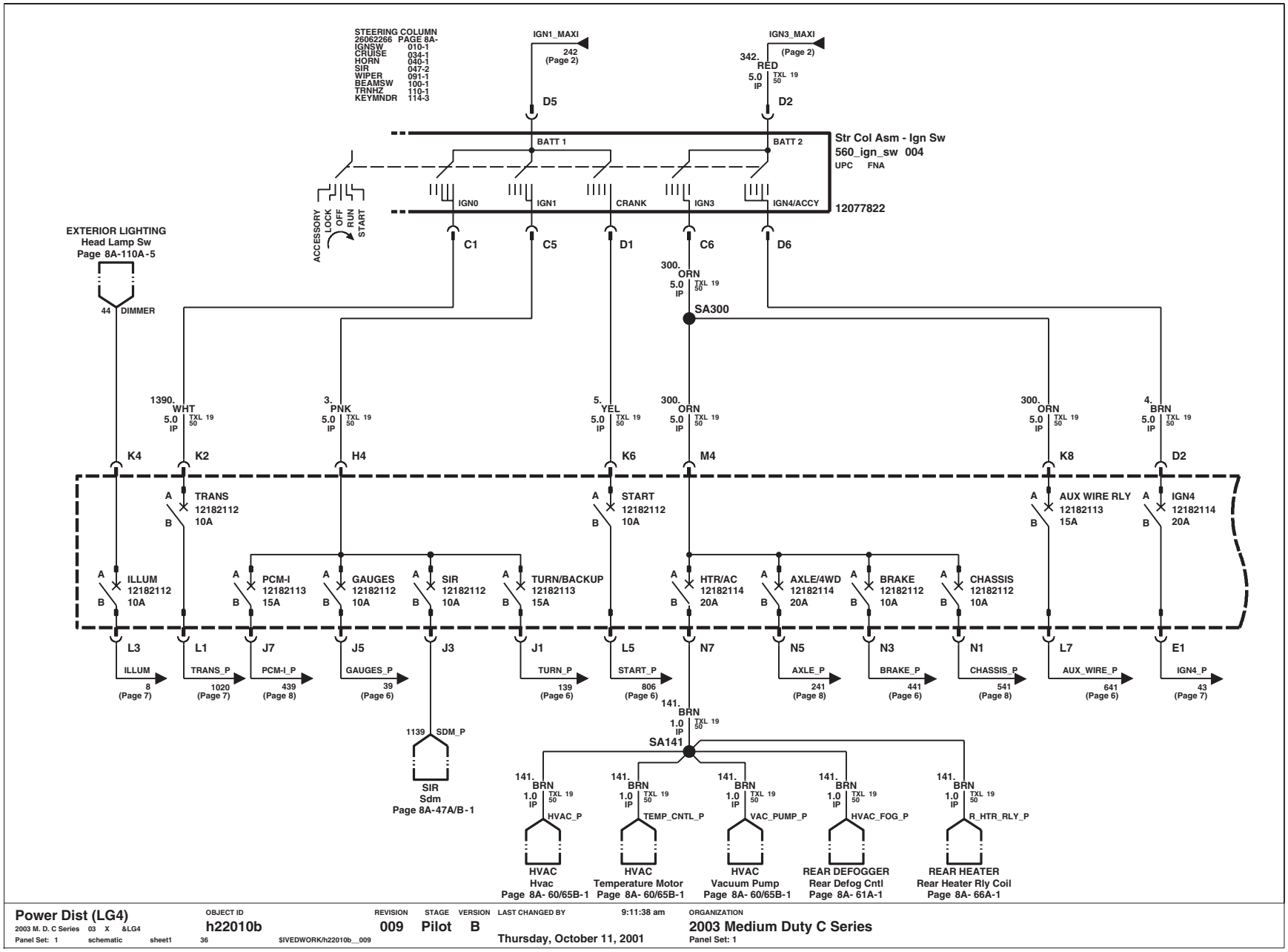


Power Distribution — (L18) 8.1L-Gas/NAPT

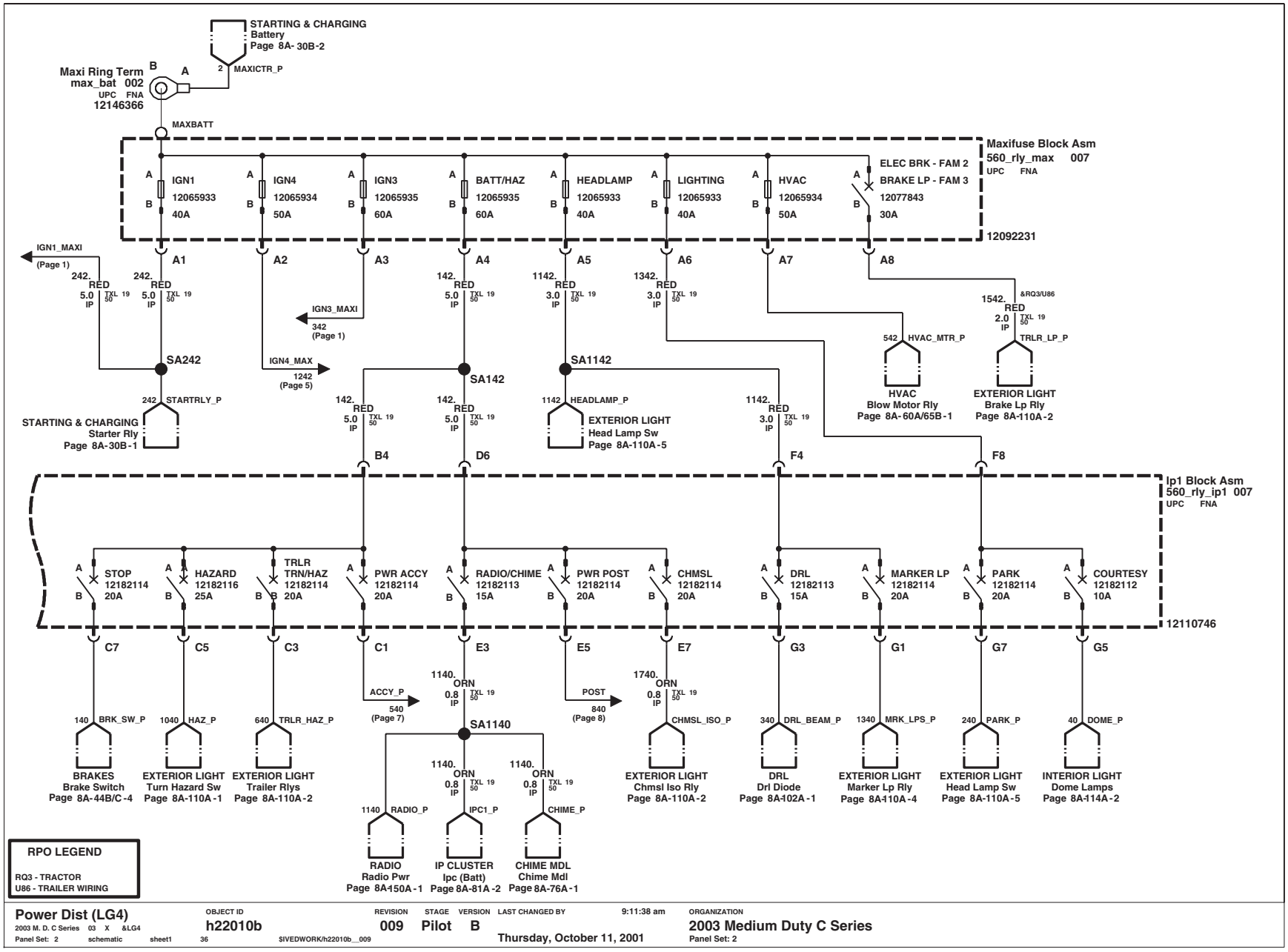
03	560	000	JG	PILOT B - INITIAL CREATION	11OC00	001	03	560	814	JG	R. ABS to R. Chassis Inline Update	03NO00	001
03	560	803	JG	UNDERHOOD CENTER LABEL CHANGE	11OC00	001	03	560	818	JG	Change UH Mini CB's to Fuses	20NO00	001
03	560	805	JG	REMOVE FAMILY 3 SCHOOL BUS CONTENT	27OC00	001	03	560	839	JG	Fuse Block & Inline Updates	21DE00	001
							03	560	981	JG	Add Family 2 School Bus Content	03AP01	001
							03	560	1062	JG	Update Block Asm Hookup	25JL01	001
							03	560	1118	JG	Added SEO Content	04OC01	001



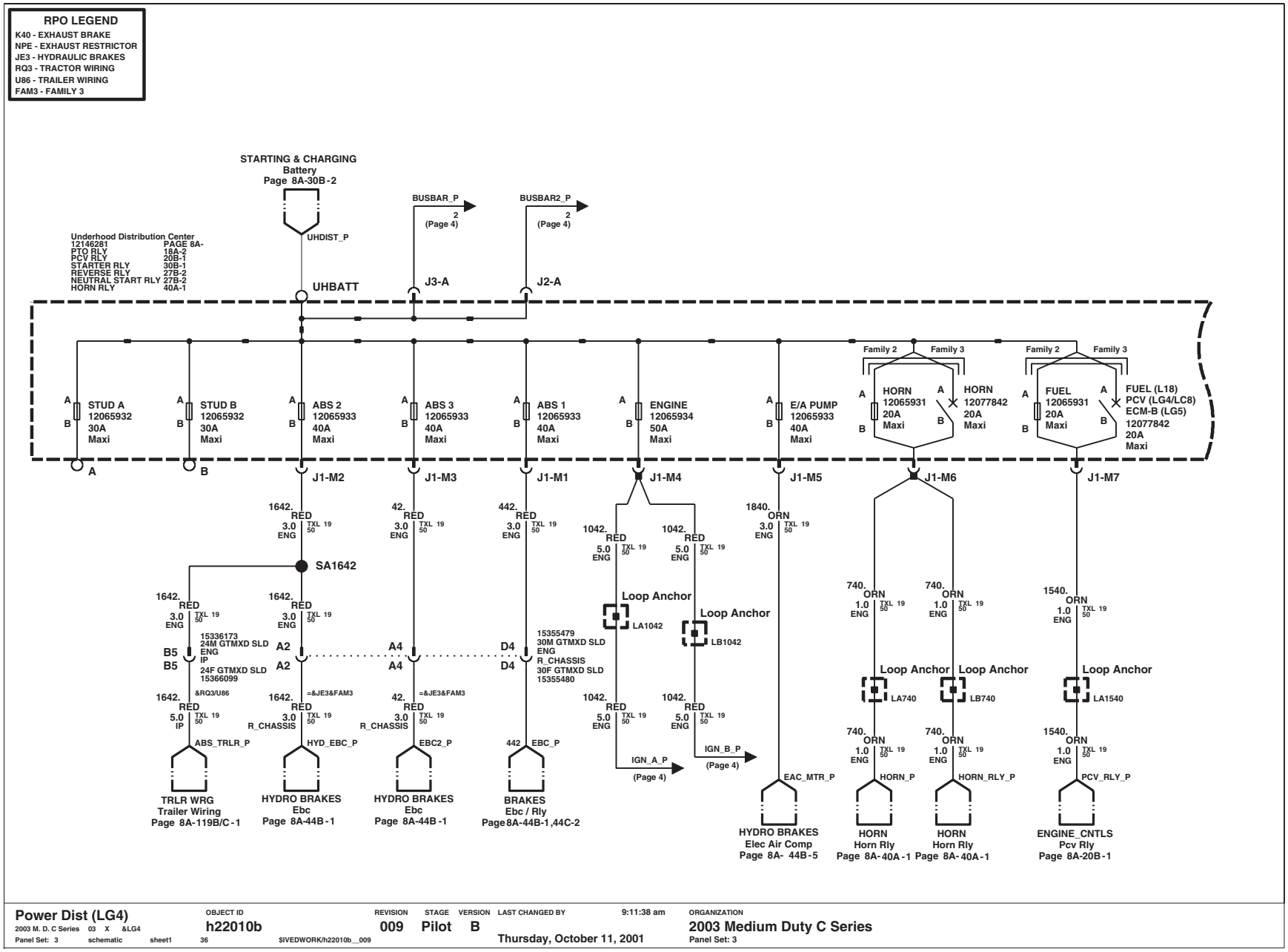
Power Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax



Power Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax



Power Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax



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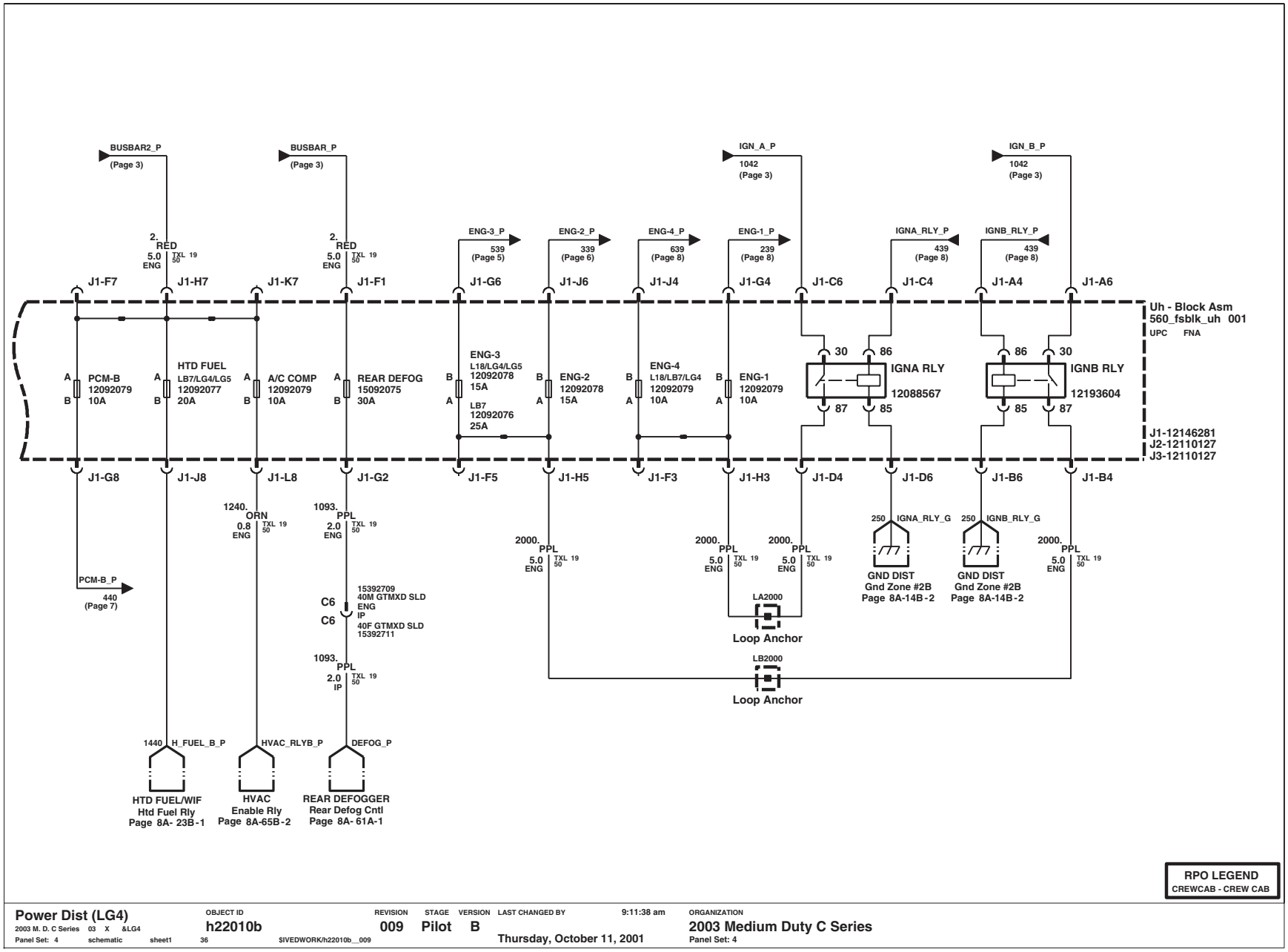
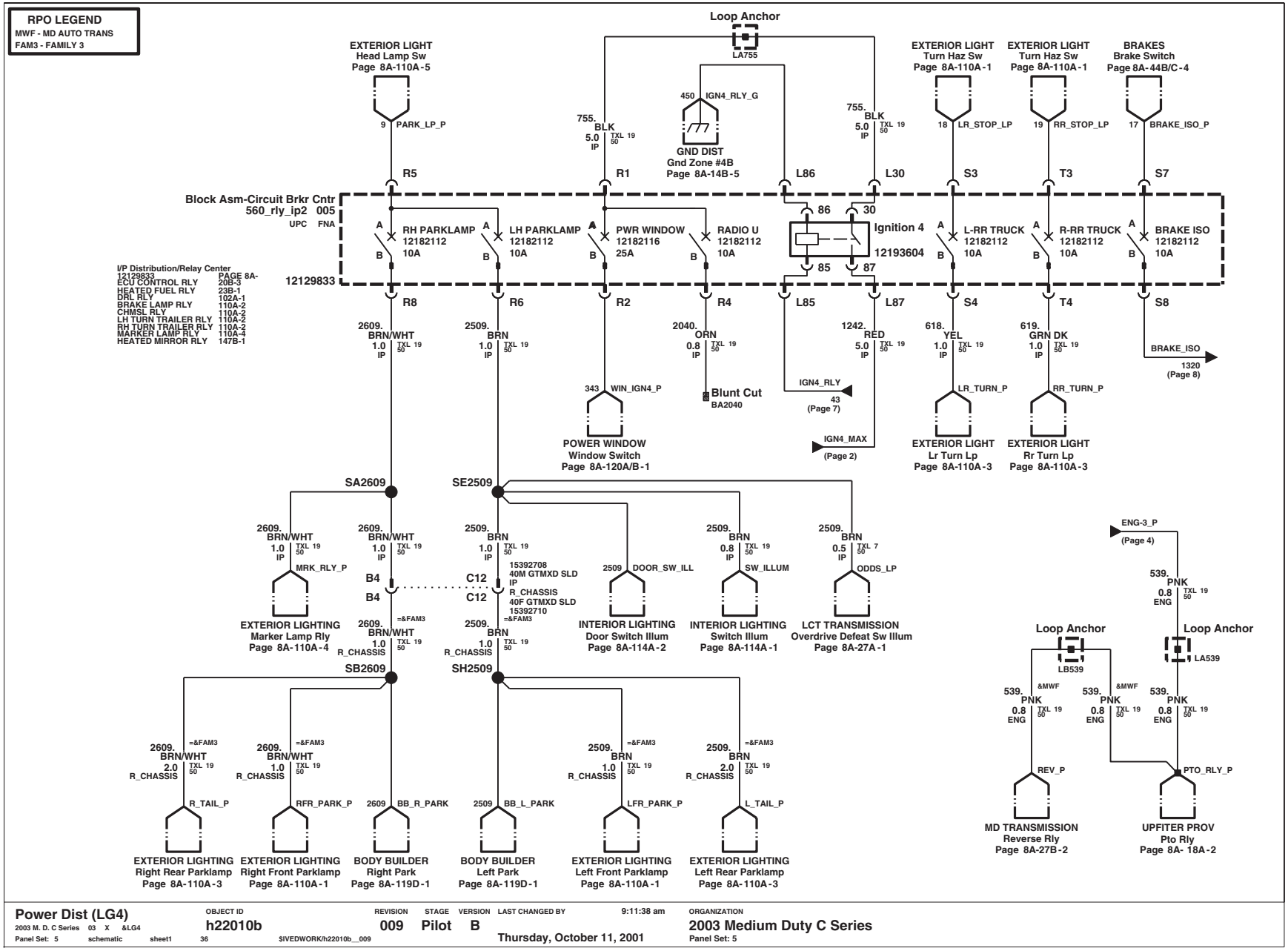
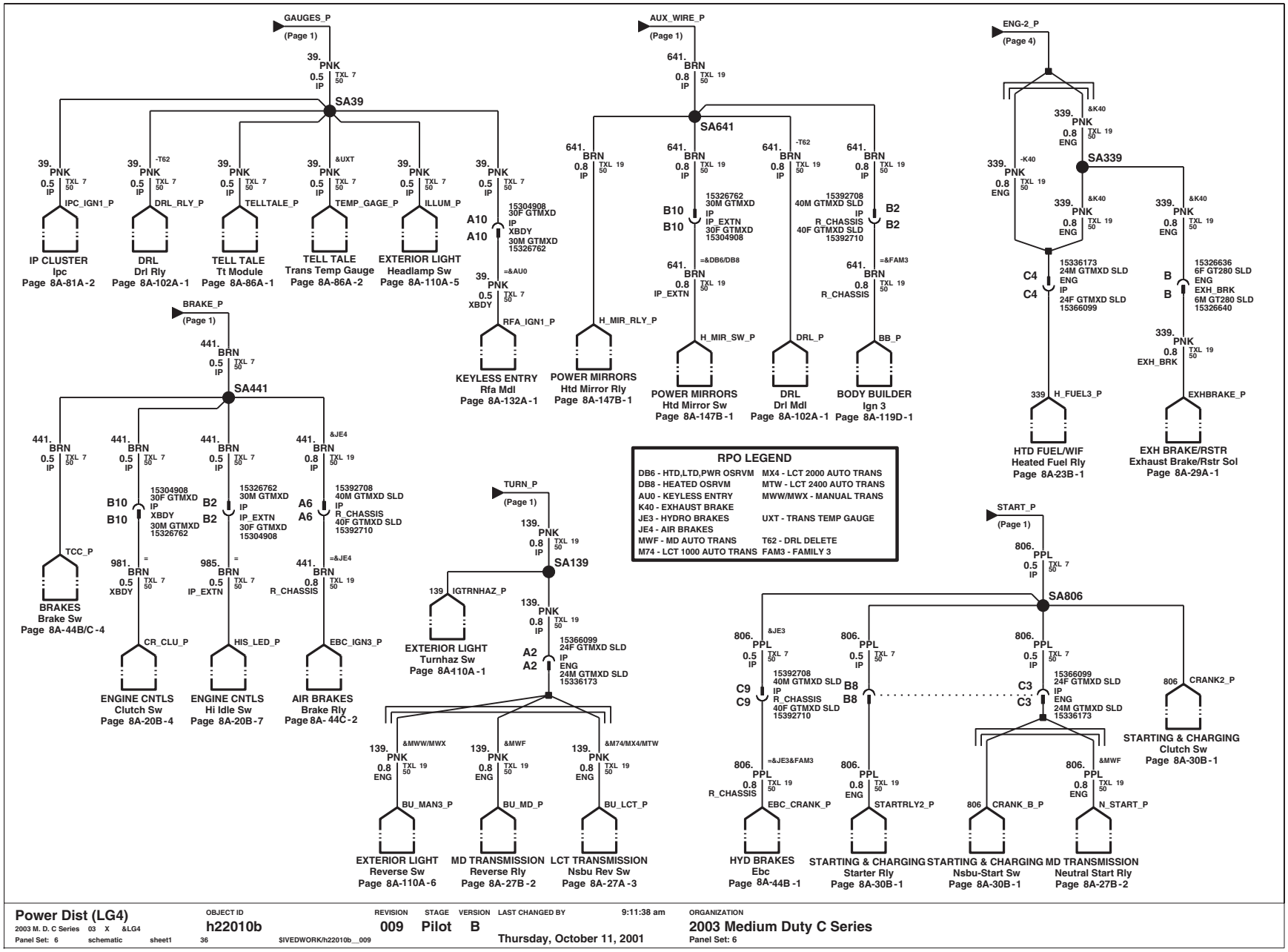


Power Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax

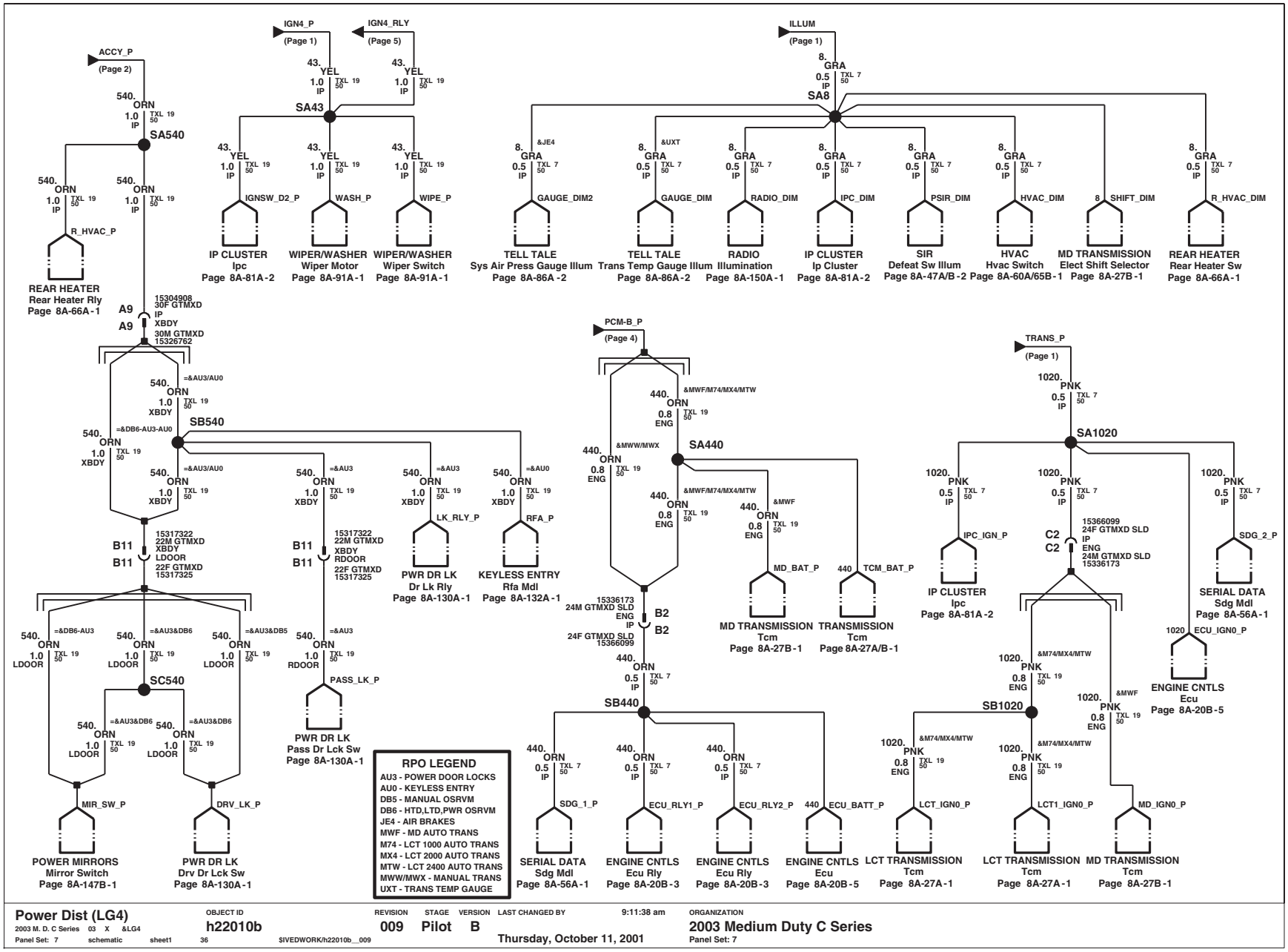


Power Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax


GAUGES_P (Page 1)
39. PNK 0.5 IP TXL 7 50
SA39
IPC_IGN1_P — IP CLUSTER, Ipc, Page 8A-81A-2
DRL_RLY_P — DRL, Drl Rly, Page 8A-102A-1
TELLTALE_P — TELL TALE, Tt Module, Page 8A-86A-1
TEMP_GAGE_P — TELL TALE, Trans Temp Gauge, Page 8A-86A-2
ILLUM_P — EXTERIOR LIGHT, Headlamp Sw, Page 8A-110A-5
A10 15304908 30F GTMXD IP XBDY 30M GTMXD 15326762
=&AU0
RFA_IGN1_P — KEYLESS ENTRY, Rfa Mdl, Page 8A-132A-1
AUX_WIRE_P (Page 1)
641. BRN 0.8 IP TXL 19 50
SA641
H_MIR_RLY_P — POWER MIRRORS, Htd Mirror Rly, Page 8A-147B-1
B10 15326762 30M GTMXD IP IP_EXTN 30F GTMXD 15304908
H_MIR_SW_P — POWER MIRRORS, Htd Mirror Sw, Page 8A-147B-1
=&DB6/DB8
DRL_P — DRL, Drl Mdl, Page 8A-102A-1
B2 15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
=&FAM3
BB_P — BODY BUILDER, Ign 3, Page 8A-119D-1
ENG-2_P (Page 4)
339. PNK 0.8 ENG TXL 19 50
SA339
C4 15336173 24M GTMXD SLD ENG IP 24F GTMXD SLD 15366099
H_FUEL3_P — HTD FUEL/WIF, Heated Fuel Rly, Page 8A-23B-1
B 15326636 6F GT280 SLD ENG EXH_BRK 6M GT280 SLD 15326640
EXH_BRK
EXHBRAKE_P — EXH BRAKE/RSTR, Exhaust Brake/Rstr Sol, Page 8A-29A-1
BRAKE_P (Page 1)
441. BRN 0.5 IP TXL 7 50
SA441
TCC_P — BRAKES, Brake Sw, Page 8A-44B/C-4
B10 15304908 30F GTMXD IP XBDY 30M GTMXD 15326762
CR_CLU_P — ENGINE CNTLS, Clutch Sw, Page 8A-20B-4
B2 15326762 30M GTMXD IP IP_EXTN 30F GTMXD 15304908
HIS_LED_P — ENGINE CNTLS, Hi Idle Sw, Page 8A-20B-7
A6 15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
=&JE4
EBC_IGN3_P — AIR BRAKES, Brake Rly, Page 8A-44C-2
TURN_P (Page 1)
139. PNK 0.8 IP TXL 19 50
SA139
139 IGTRNHAZ_P — EXTERIOR LIGHT, Turnhaz Sw, Page 8A-110A-1
A2 15366099 24F GTMXD SLD IP ENG 24M GTMXD SLD 15336173
&MWW/MWX
BU_MAN3_P — EXTERIOR LIGHT, Reverse Sw, Page 8A-110A-6
&MWF
BU_MD_P — MD TRANSMISSION, Reverse Rly, Page 8A-27B-2
&M74/MX4/MTW
BU_LCT_P — LCT TRANSMISSION, Nsbu Rev Sw, Page 8A-27A-3
RPO LEGEND
DB6 - HTD,LTD,PWR OSRVM
DB8 - HEATED OSRVM
AU0 - KEYLESS ENTRY
K40 - EXHAUST BRAKE
JE3 - HYDRO BRAKES
JE4 - AIR BRAKES
MWF - MD AUTO TRANS
M74 - LCT 1000 AUTO TRANS
MX4 - LCT 2000 AUTO TRANS
MTW - LCT 2400 AUTO TRANS
MWW/MWX - MANUAL TRANS
UXT - TRANS TEMP GAUGE
T62 - DRL DELETE
FAM3 - FAMILY 3
START_P (Page 1)
806. PPL 0.5 IP TXL 7 50
SA806
C9 15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
EBC_CRANK_P — HYD BRAKES, Ebc, Page 8A-44B-1
B8
STARTRLY2_P — STARTING & CHARGING, Starter Rly, Page 8A-30B-1
C3 15366099 24F GTMXD SLD IP ENG 24M GTMXD SLD 15336173
CRANK_B_P — STARTING & CHARGING, Nsbu-Start Sw, Page 8A-30B-1
N_START_P — MD TRANSMISSION, Neutral Start Rly, Page 8A-27B-2
CRANK2_P — STARTING & CHARGING, Clutch Sw, Page 8A-30B-1

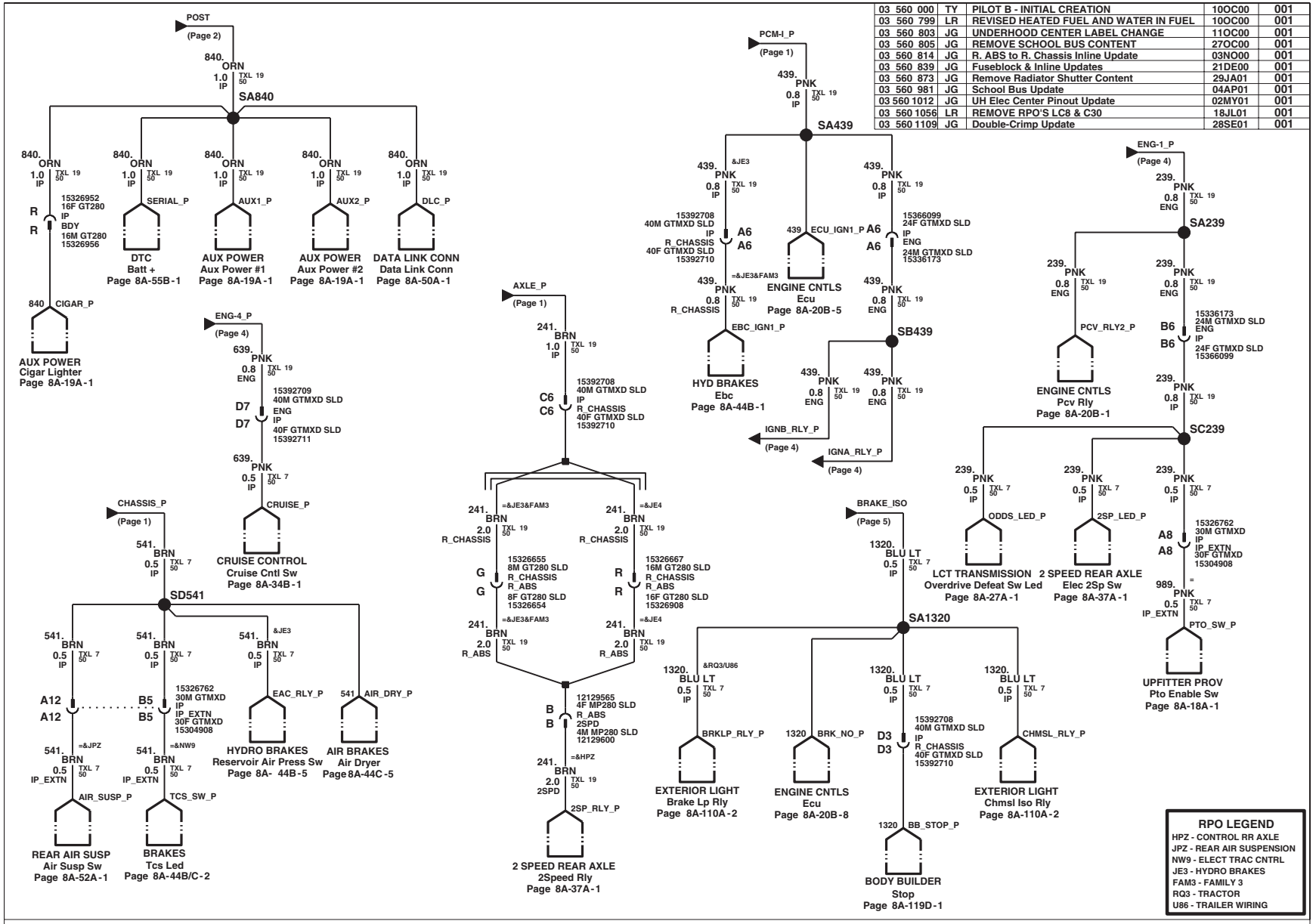
Power Dist (LG4)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY	9:11:38 am	ORGANIZATION
2003 M. D. C Series 03 X &LG4	h22010b	009	Pilot	B	Thursday, October 11, 2001		2003 Medium Duty C Series
Panel Set: 6 schematic sheet1 36	$IVEDWORK/h22010b__009						Panel Set: 6

Power Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax


ACCY_P (Page 2)
IGN4_P (Page 1)
IGN4_RLY (Page 5)
ILLUM (Page 1)
PCM-B_P (Page 4)
TRANS_P (Page 1)
SA540
SA43
SA8
SA440
SA1020
SB540
SB440
SB1020
SC540
A9
B11
B2
C2
IP CLUSTER Ipc Page 8A-81A-2
WIPER/WASHER Wiper Motor Page 8A-91A-1
WIPER/WASHER Wiper Switch Page 8A-91A-1
TELL TALE Sys Air Press Gauge Illum Page 8A-86A-2
TELL TALE Trans Temp Gauge Illum Page 8A-86A-2
RADIO Illumination Page 8A-150A-1
IP CLUSTER Ip Cluster Page 8A-81A-2
SIR Defeat Sw Illum Page 8A-47A/B-2
HVAC Hvac Switch Page 8A-60A/65B-1
MD TRANSMISSION Elect Shift Selector Page 8A-27B-1
REAR HEATER Rear Heater Sw Page 8A-66A-1
REAR HEATER Rear Heater Rly Page 8A-66A-1
PWR DR LK Dr Lk Rly Page 8A-130A-1
KEYLESS ENTRY Rfa Mdl Page 8A-132A-1
PWR DR LK Pass Dr Lck Sw Page 8A-130A-1
POWER MIRRORS Mirror Switch Page 8A-147B-1
PWR DR LK Drv Dr Lck Sw Page 8A-130A-1
MD TRANSMISSION Tcm Page 8A-27B-1
TRANSMISSION Tcm Page 8A-27A/B-1
SERIAL DATA Sdg Mdl Page 8A-56A-1
ENGINE CNTLS Ecu Rly Page 8A-20B-3
ENGINE CNTLS Ecu Rly Page 8A-20B-3
ENGINE CNTLS Ecu Page 8A-20B-5
LCT TRANSMISSION Tcm Page 8A-27A-1
LCT TRANSMISSION Tcm Page 8A-27A-1
MD TRANSMISSION Tcm Page 8A-27B-1
IP CLUSTER Ipc Page 8A-81A-2
SERIAL DATA Sdg Mdl Page 8A-56A-1
ENGINE CNTLS Ecu Page 8A-20B-5
RPO LEGEND
AU3 - POWER DOOR LOCKS
AU0 - KEYLESS ENTRY
DB5 - MANUAL OSRVM
DB6 - HTD,LTD,PWR OSRVM
JE4 - AIR BRAKES
MWF - MD AUTO TRANS
M74 - LCT 1000 AUTO TRANS
MX4 - LCT 2000 AUTO TRANS
MTW - LCT 2400 AUTO TRANS
MWW/MWX - MANUAL TRANS
UXT - TRANS TEMP GAUGE
Power Dist (LG4)
2003 M. D. C Series 03 X &LG4
Panel Set: 7 schematic sheet1 36
OBJECT ID h22010b
REVISION 009
STAGE Pilot
VERSION B
LAST CHANGED BY
9:11:38 am
Thursday, October 11, 2001
ORGANIZATION
2003 Medium Duty C Series
Panel Set: 7

Power Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax

03 560 000	TY	PILOT B - INITIAL CREATION	10OC00	001
03 560 799	LR	REVISED HEATED FUEL AND WATER IN FUEL	10OC00	001
03 560 803	JG	UNDERHOOD CENTER LABEL CHANGE	11OC00	001
03 560 805	JG	REMOVE SCHOOL BUS CONTENT	27OC00	001
03 560 814	JG	R. ABS to R. Chassis Inline Update	03NO00	001
03 560 839	JG	Fuseblock & Inline Updates	21DE00	001
03 560 873	JG	Remove Radiator Shutter Content	29JA01	001
03 560 981	JG	School Bus Update	04AP01	001
03 560 1012	JG	UH Elec Center Pinout Update	02MY01	001
03 560 1056	LR	REMOVE RPO'S LC8 & C30	18JL01	001
03 560 1109	JG	Double-Crimp Update	28SE01	001


POST
(Page 2)
840. ORN 1.0 IP TXL 19 50
SA840
840. ORN 1.0 IP TXL 19 50
15326952 16F GT280 IP BDY 16M GT280 15326956
R
R
840 CIGAR_P
AUX POWER Cigar Lighter Page 8A-19A-1
SERIAL_P
DTC Batt + Page 8A-55B-1
AUX1_P
AUX POWER Aux Power #1 Page 8A-19A-1
AUX2_P
AUX POWER Aux Power #2 Page 8A-19A-1
DLC_P
DATA LINK CONN Data Link Conn Page 8A-50A-1
ENG-4_P
(Page 4)
639. PNK 0.8 ENG TXL 19 50
15392709 40M GTMXD SLD ENG IP 40F GTMXD SLD 15392711
D7
D7
639. PNK 0.5 IP TXL 7 50
CRUISE_P
CRUISE CONTROL Cruise Cntl Sw Page 8A-34B-1
CHASSIS_P
(Page 1)
541. BRN 0.5 IP TXL 7 50
SD541
541. BRN 0.5 IP TXL 7 50
A12
A12
15326762 30M GTMXD IP IP_EXTN 30F GTMXD 15304908
B5
B5
=&JPZ
541. BRN 0.5 IP_EXTN TXL 7 50
AIR_SUSP_P
REAR AIR SUSP Air Susp Sw Page 8A-52A-1
=&NW9
541. BRN 0.5 IP_EXTN TXL 7 50
TCS_SW_P
BRAKES Tcs Led Page 8A-44B/C-2
541. BRN 0.5 IP TXL 7 50
&JE3
EAC_RLY_P
HYDRO BRAKES Reservoir Air Press Sw Page 8A- 44B-5
541 AIR_DRY_P
AIR BRAKES Air Dryer Page 8A-44C-5
AXLE_P
(Page 1)
241. BRN 1.0 IP TXL 19 50
15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
C6
C6
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15326655 8M GT280 SLD R_CHASSIS R_ABS 8F GT280 SLD 15326654
G
G
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=&JE3&FAM3
241. BRN 2.0 R_CHASSIS TXL 19 50
=&JE4
15326667 16M GT280 SLD R_CHASSIS R_ABS 16F GT280 SLD 15326908
R
R
241. BRN 2.0 R_ABS TXL 19 50
=&JE4
B
B
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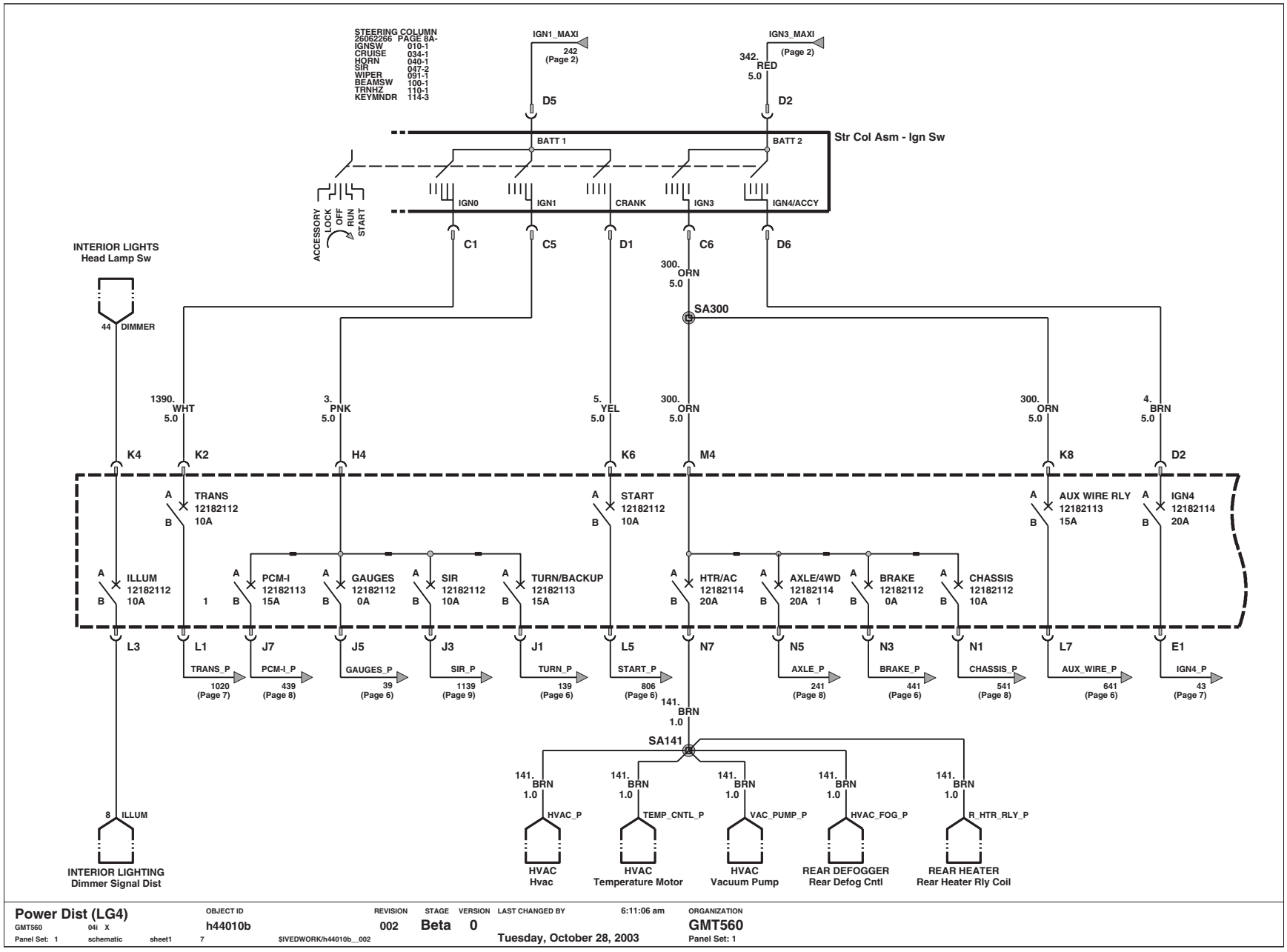
241. BRN 2.0 2SPD TXL 19 50
=&HPZ
2SP_RLY_P
2 SPEED REAR AXLE 2Speed Rly Page 8A-37A-1
PCM-I_P
(Page 1)
439. PNK 0.8 IP TXL 19 50
SA439
439. PNK 0.8 IP TXL 19 50
&JE3
15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
A6
A6
439. PNK 0.8 R_CHASSIS TXL 19 50
EBC_IGN1_P
HYD BRAKES Ebc Page 8A-44B-1
439 ECU_IGN1_P
=&JE3&FAM3
ENGINE CNTLS Ecu Page 8A-20B-5
439. PNK 0.8 IP TXL 19 50
15366099 24F GTMXD SLD IP ENG 24M GTMXD SLD 15336173
A6
A6
439. PNK 0.8 ENG TXL 19 50
SB439
439. PNK 0.8 ENG TXL 19 50
IGNB_RLY_P
(Page 4)
439. PNK 0.8 ENG TXL 19 50
IGNA_RLY_P
(Page 4)
ENG-1_P
(Page 4)
239. PNK 0.8 ENG TXL 19 50
SA239
239. PNK 0.8 ENG TXL 19 50
PCV_RLY2_P
ENGINE CNTLS Pcv Rly Page 8A-20B-1
239. PNK 0.8 ENG TXL 19 50
15336173 24M GTMXD SLD ENG IP 24F GTMXD SLD 15366099
B6
B6
239. PNK 0.8 IP TXL 19 50
SC239
239. PNK 0.5 IP TXL 7 50
ODDS_LED_P
LCT TRANSMISSION Overdrive Defeat Sw Led Page 8A-27A-1
239. PNK 0.5 IP TXL 7 50
2SP_LED_P
2 SPEED REAR AXLE Elec 2Sp Sw Page 8A-37A-1
239. PNK 0.5 IP TXL 7 50
15326762 30M GTMXD IP IP_EXTN 30F GTMXD 15304908
A8
A8
989. PNK 0.5 IP_EXTN TXL 7 50
PTO_SW_P
UPFITTER PROV Pto Enable Sw Page 8A-18A-1
BRAKE_ISO
(Page 5)
1320. BLU LT 0.5 IP TXL 7 50
SA1320
1320. BLU LT 0.5 IP TXL 7 50
&RQ3/U86
BRKLP_RLY_P
EXTERIOR LIGHT Brake Lp Rly Page 8A-110A-2
1320 BRK_NO_P
ENGINE CNTLS Ecu Page 8A-20B-8
1320. BLU LT 0.5 IP TXL 7 50
15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
D3
D3
1320 BB_STOP_P
BODY BUILDER Stop Page 8A-119D-1
1320. BLU LT 0.5 IP TXL 7 50
CHMSL_RLY_P
EXTERIOR LIGHT Chmsl Iso Rly Page 8A-110A-2
RPO LEGEND
HPZ - CONTROL RR AXLE
JPZ - REAR AIR SUSPENSION
NW9 - ELECT TRAC CNTRL
JE3 - HYDRO BRAKES
FAM3 - FAMILY 3
RQ3 - TRACTOR
U86 - TRAILER WIRING

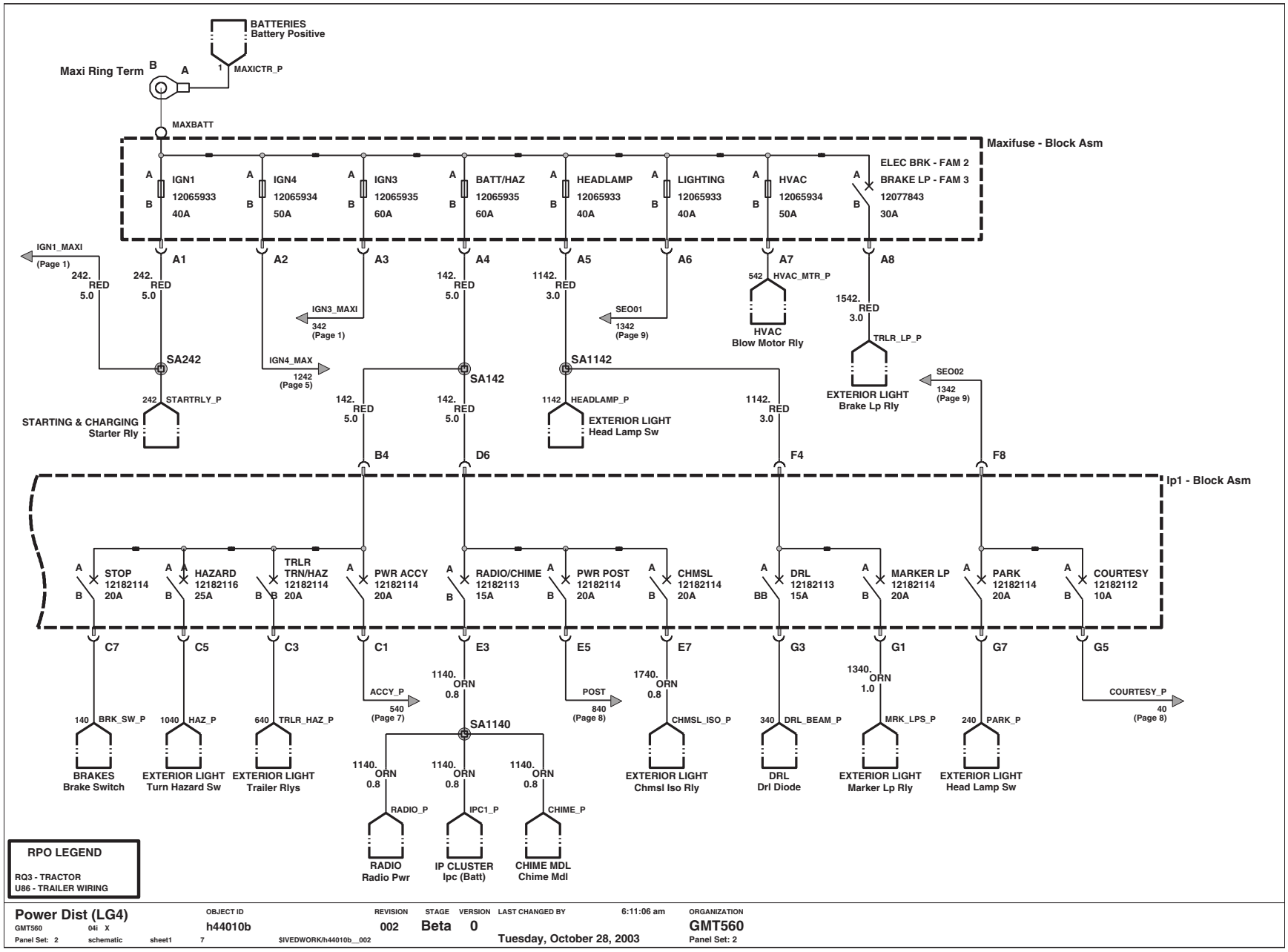
Power Dist (LG4)
2003 M. D. C Series 03 X &LG4
Panel Set: 8 schematic sheet1 36

OBJECT ID: h22010b
REVISION: 009
STAGE: Pilot
VERSION: B
LAST CHANGED BY: SIVEDWORK/h22010b__009
9:11:38 am Thursday, October 11, 2001
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 8

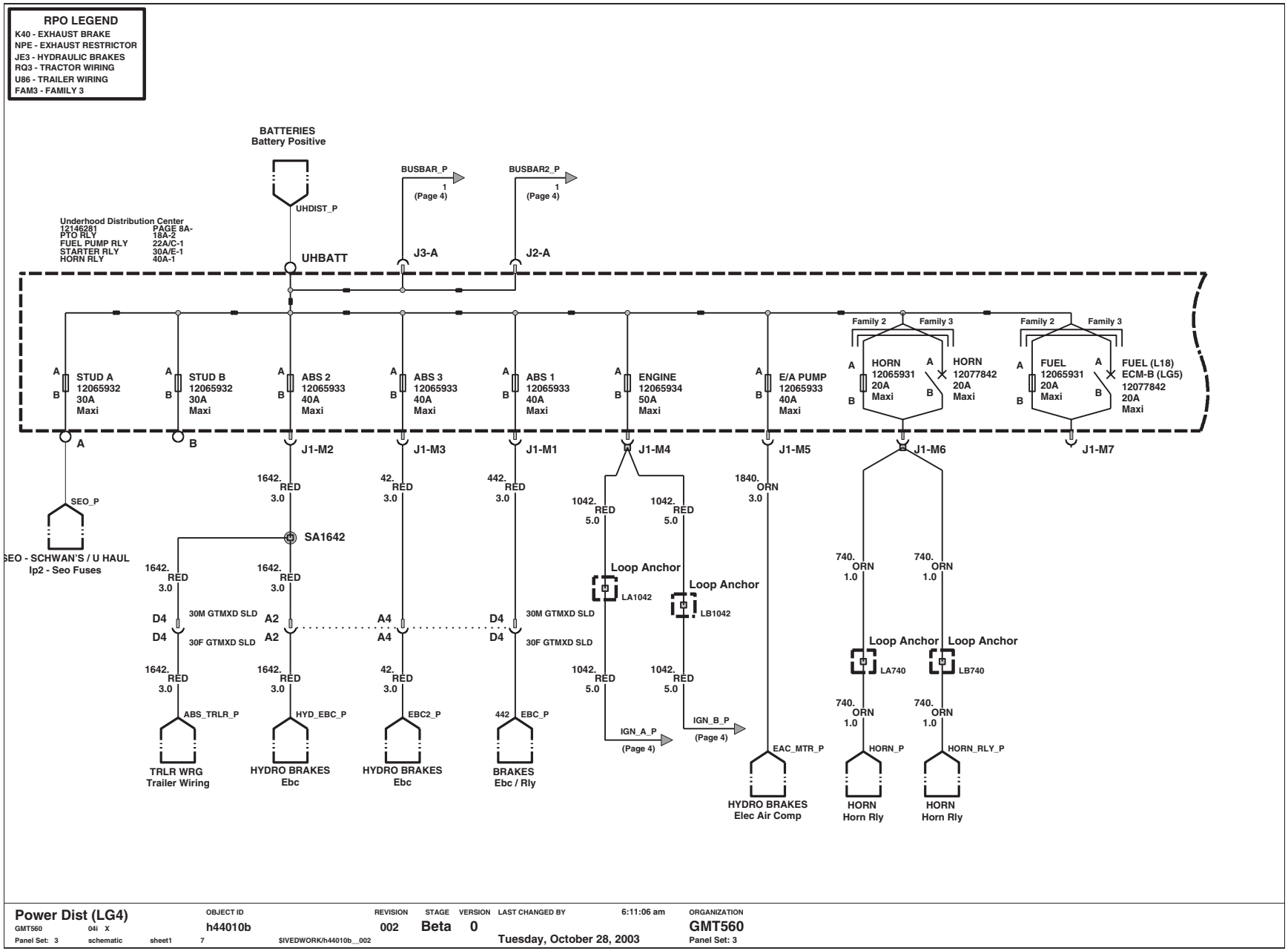
Power Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



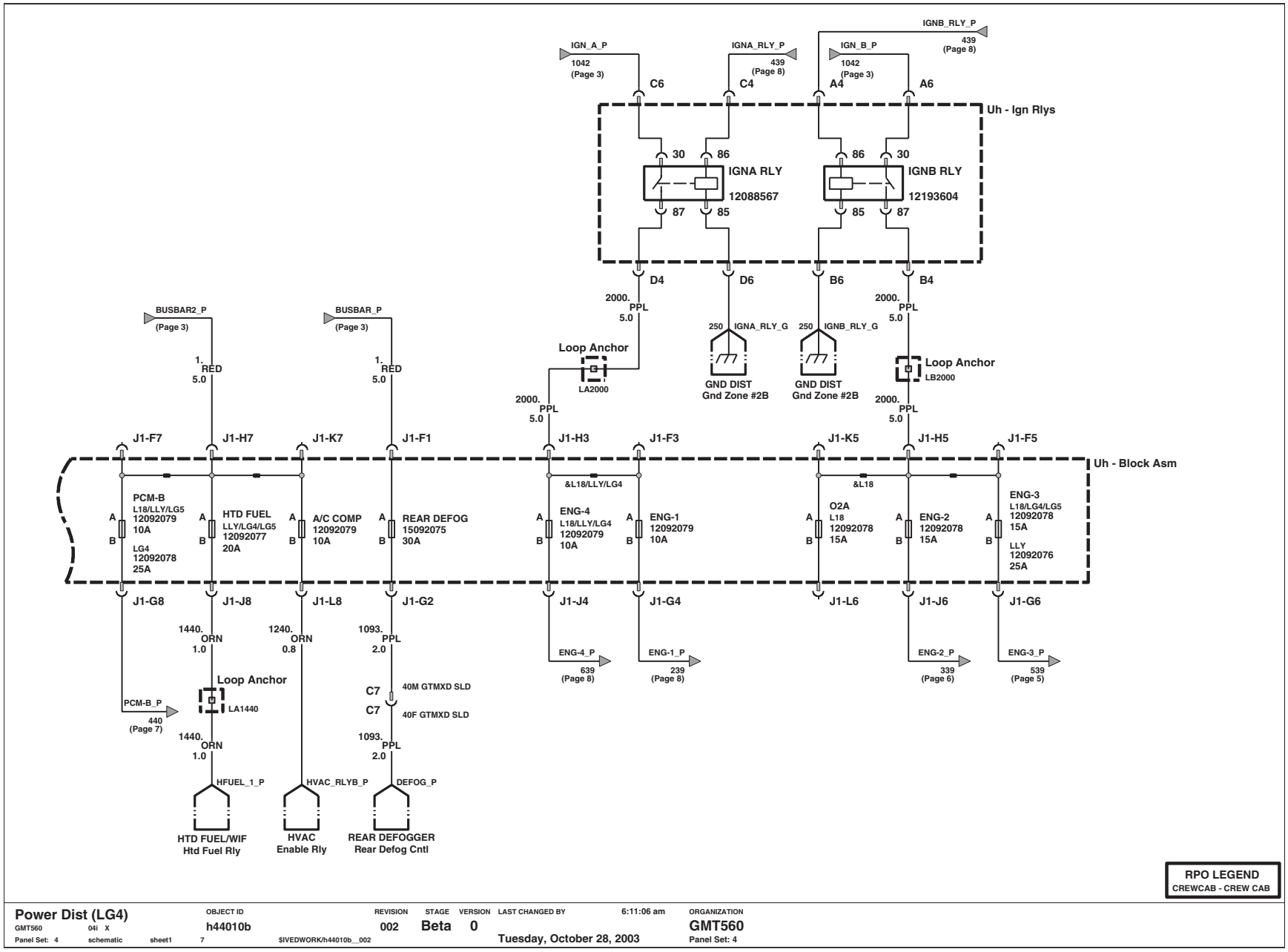
Power Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



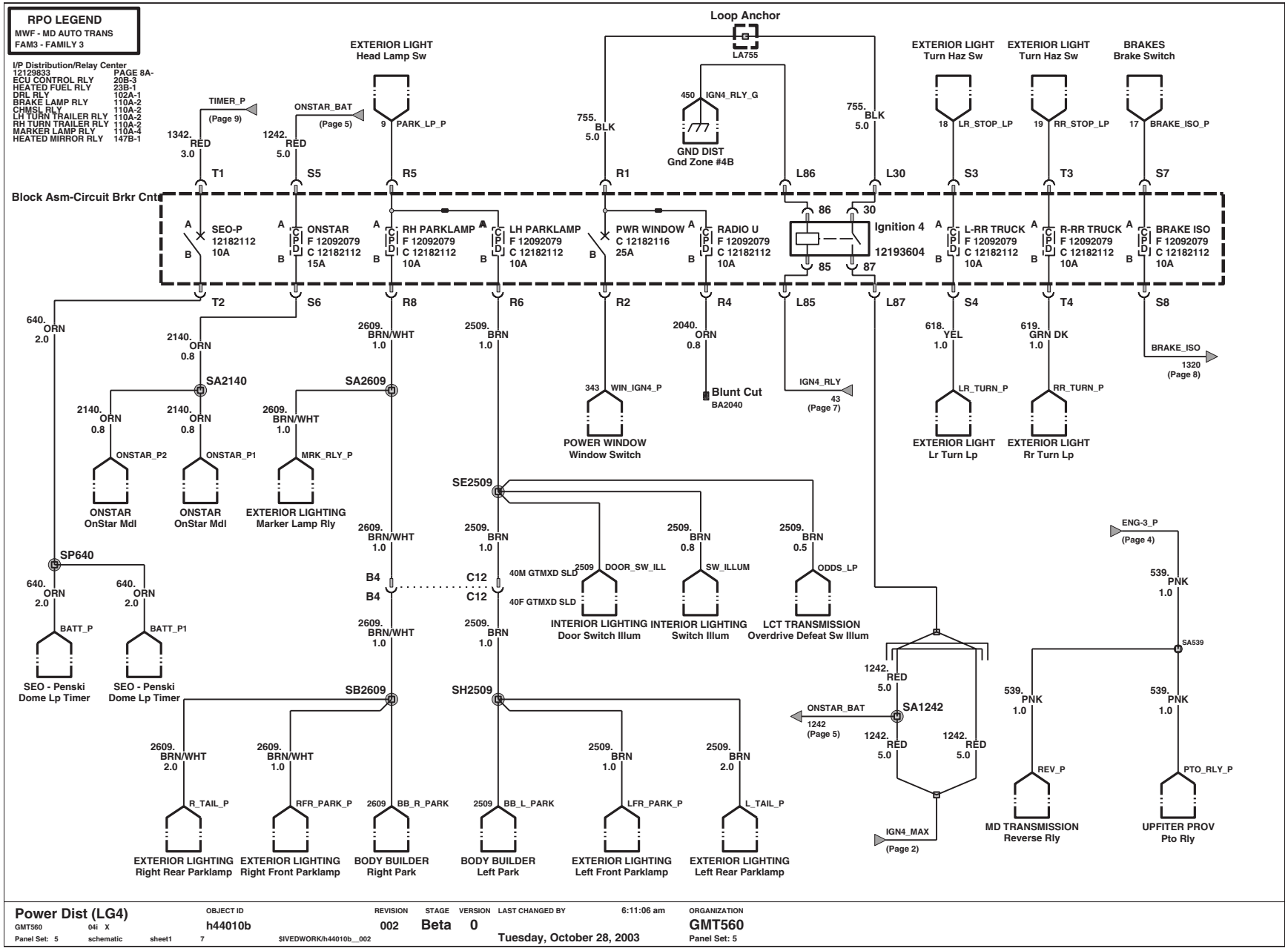
Power Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



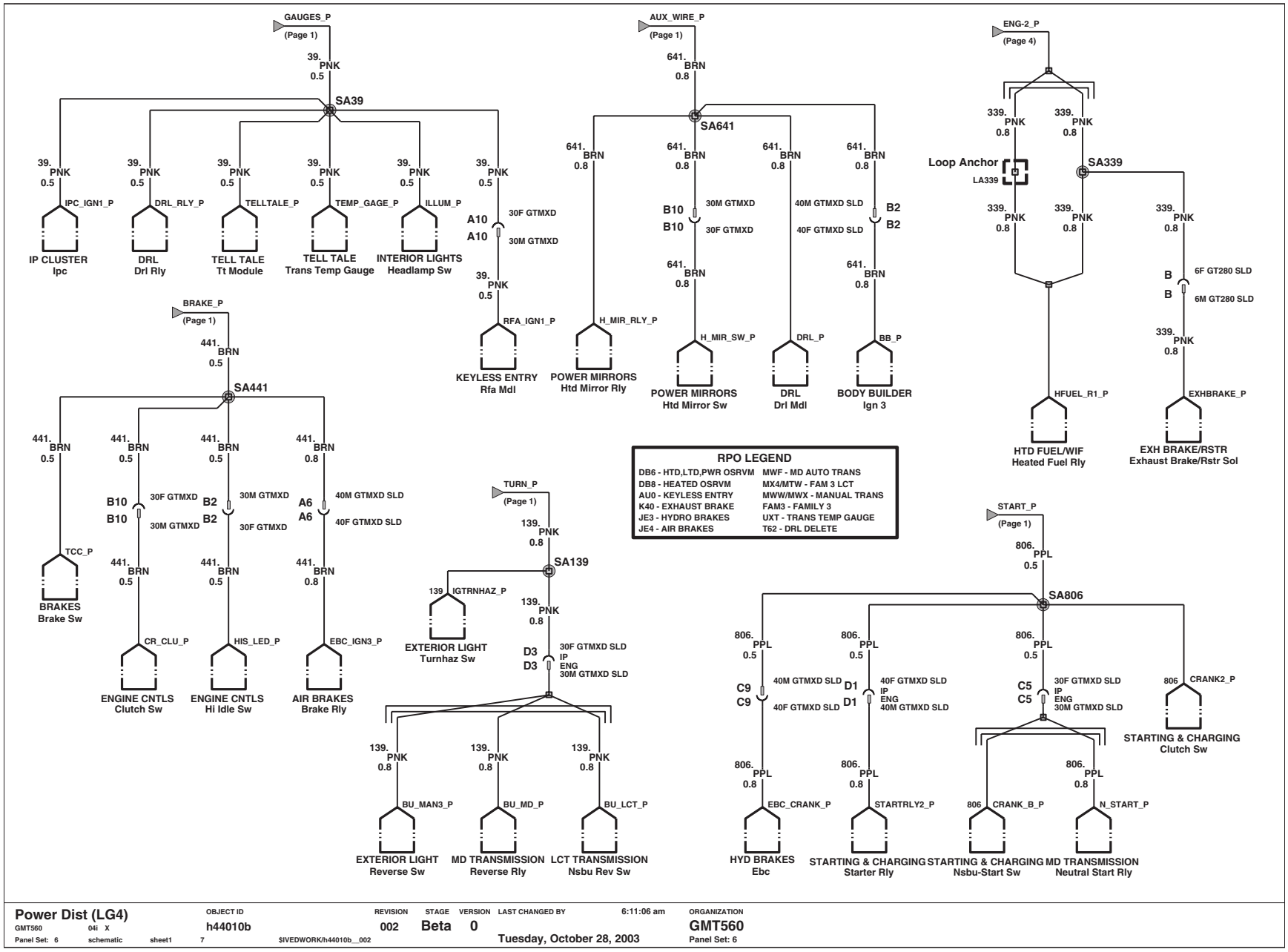
Power Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



Power Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



Power Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



Power Dist (LG4)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
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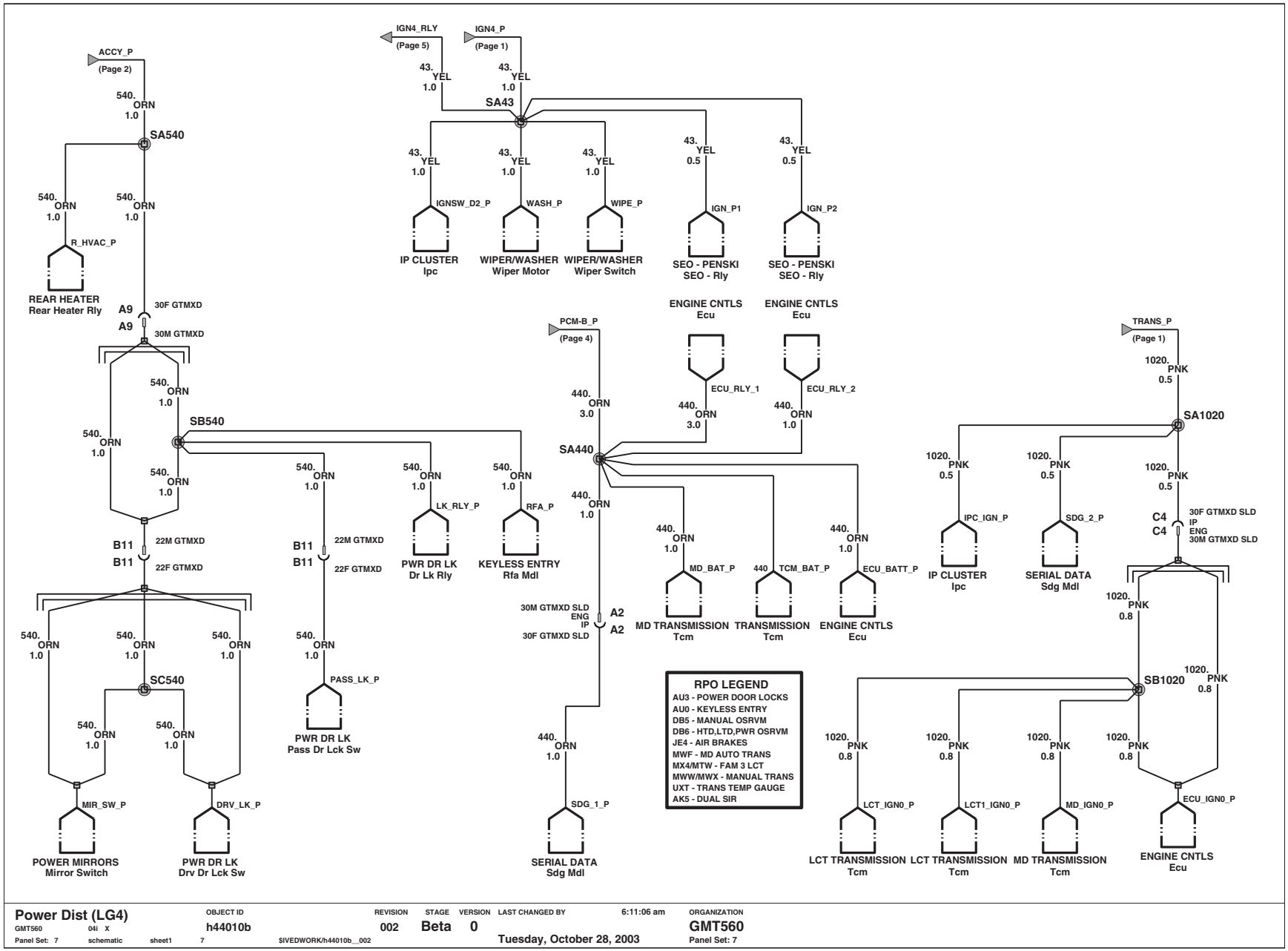
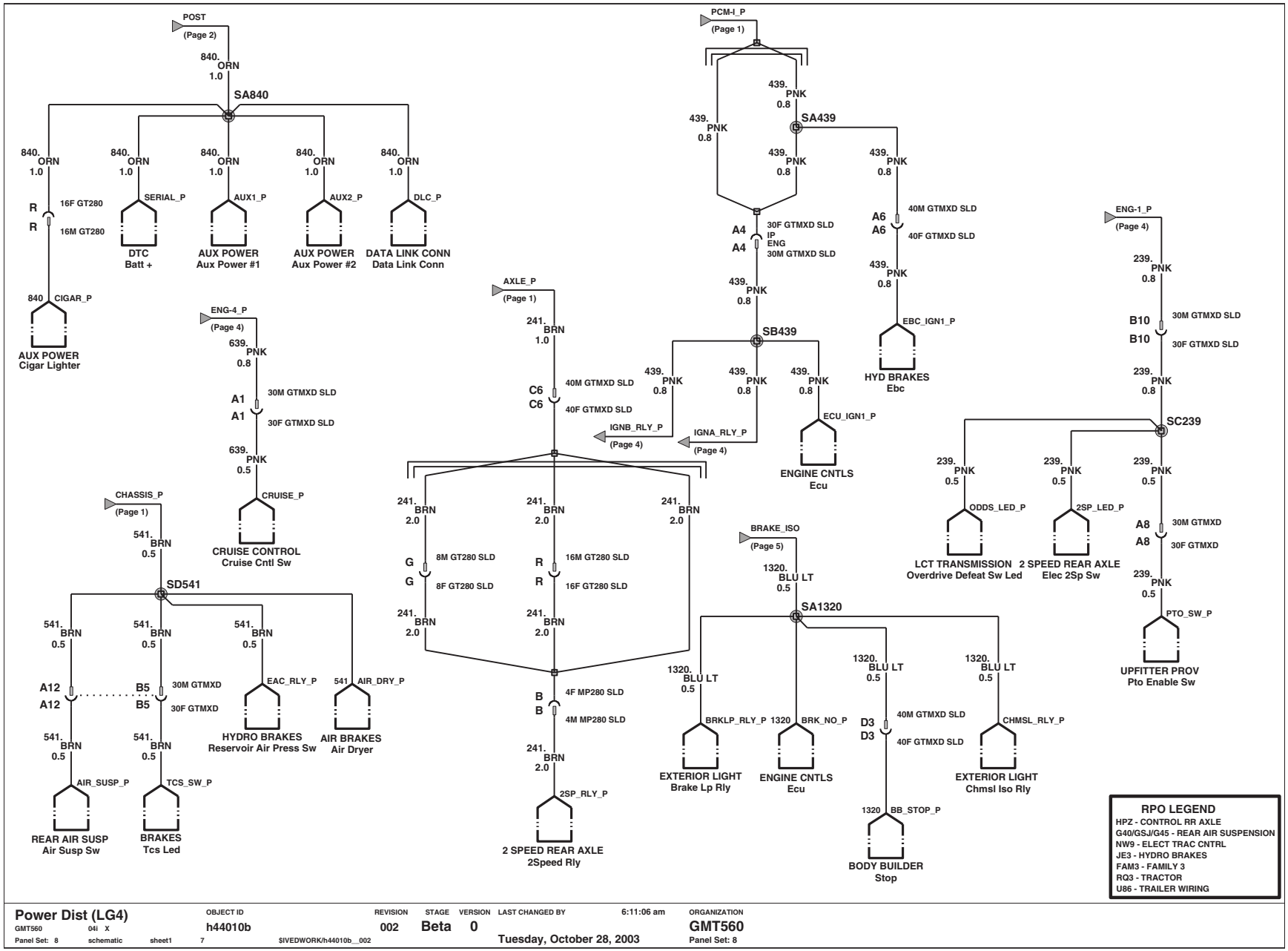
Panel Set: 6 schematic sheet1 7	$IVEDWORK/h44010b__002				Tuesday, October 28, 2003		Panel Set: 6

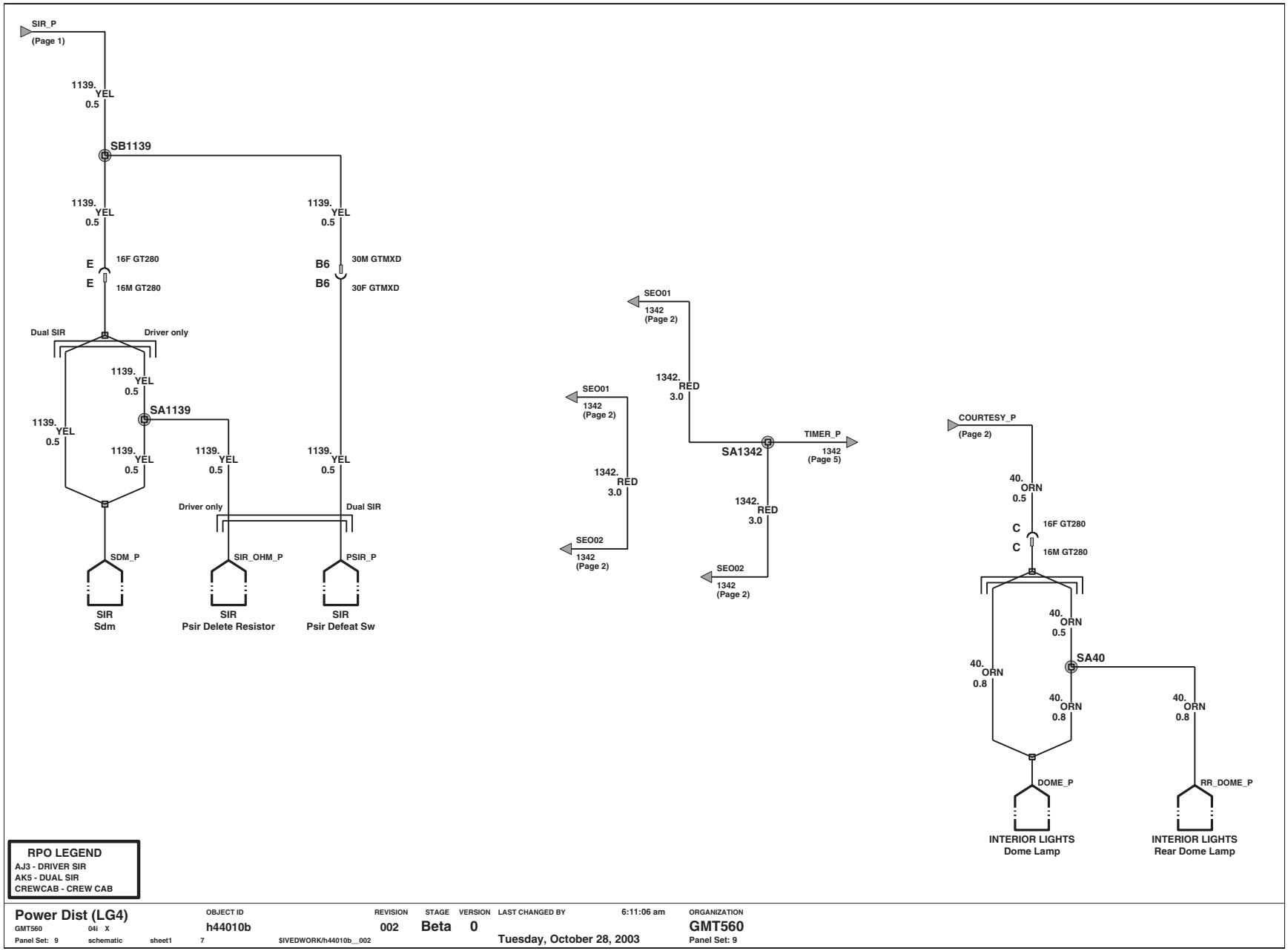
Power Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



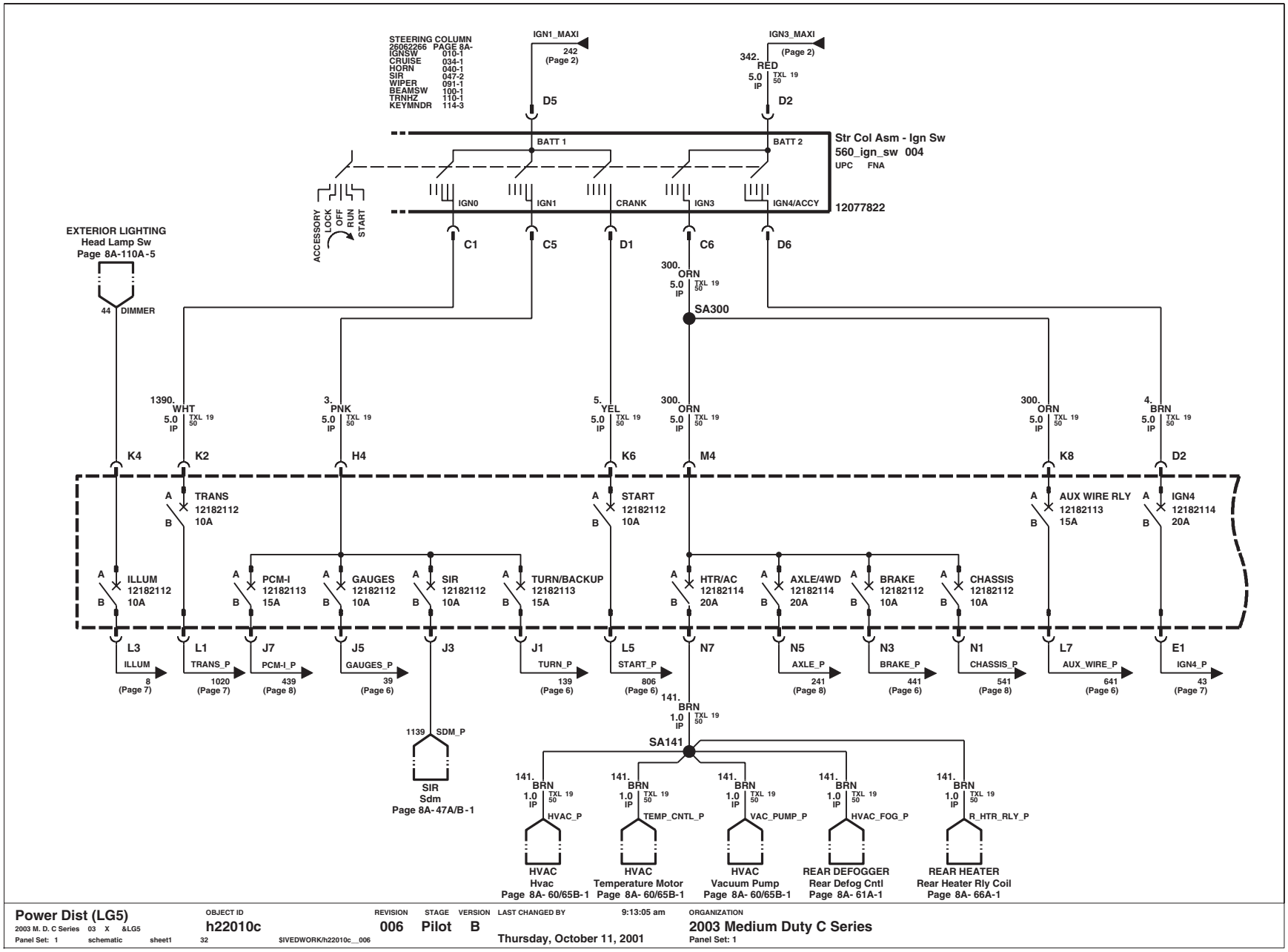
Power Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



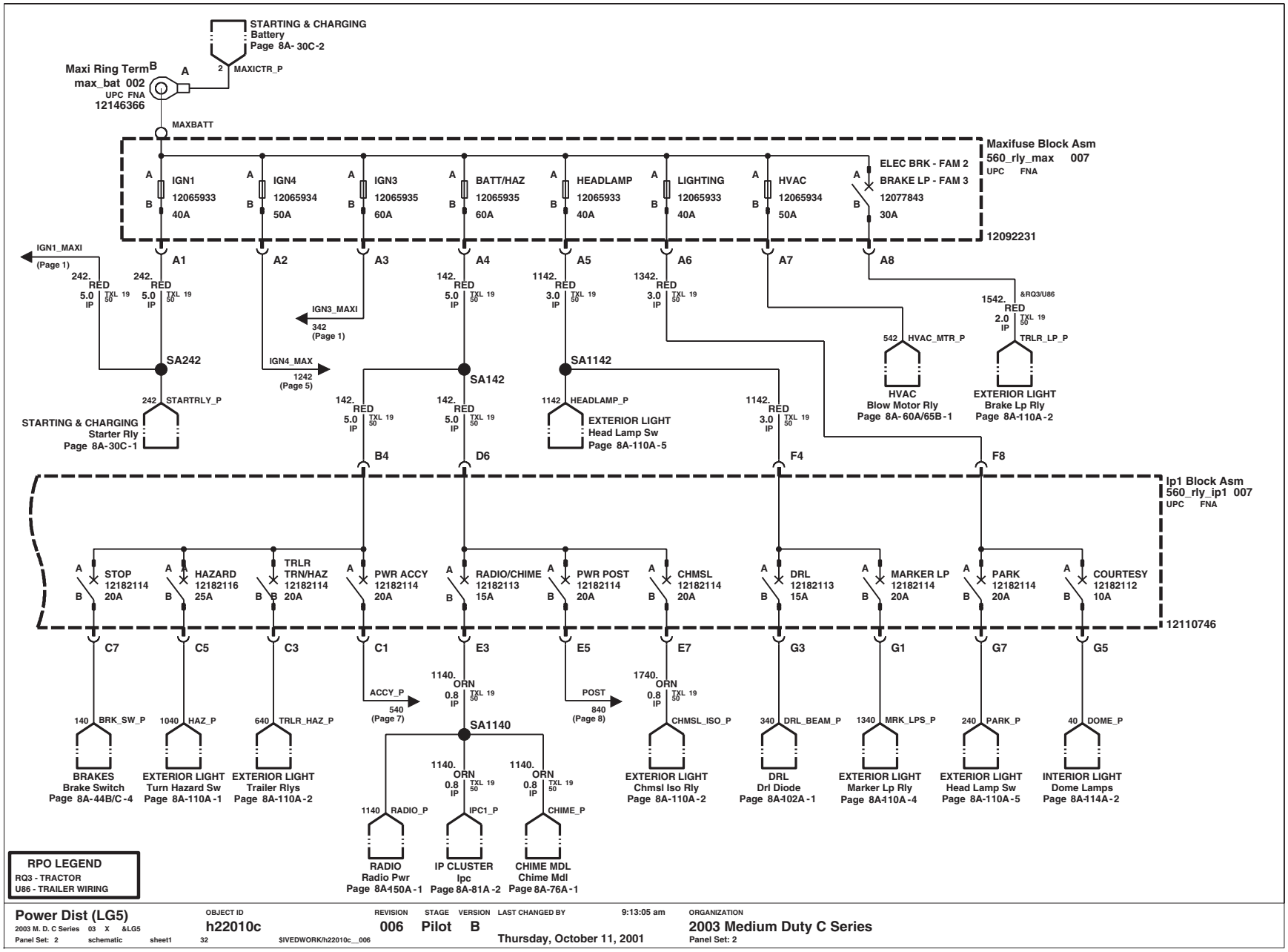
Power Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



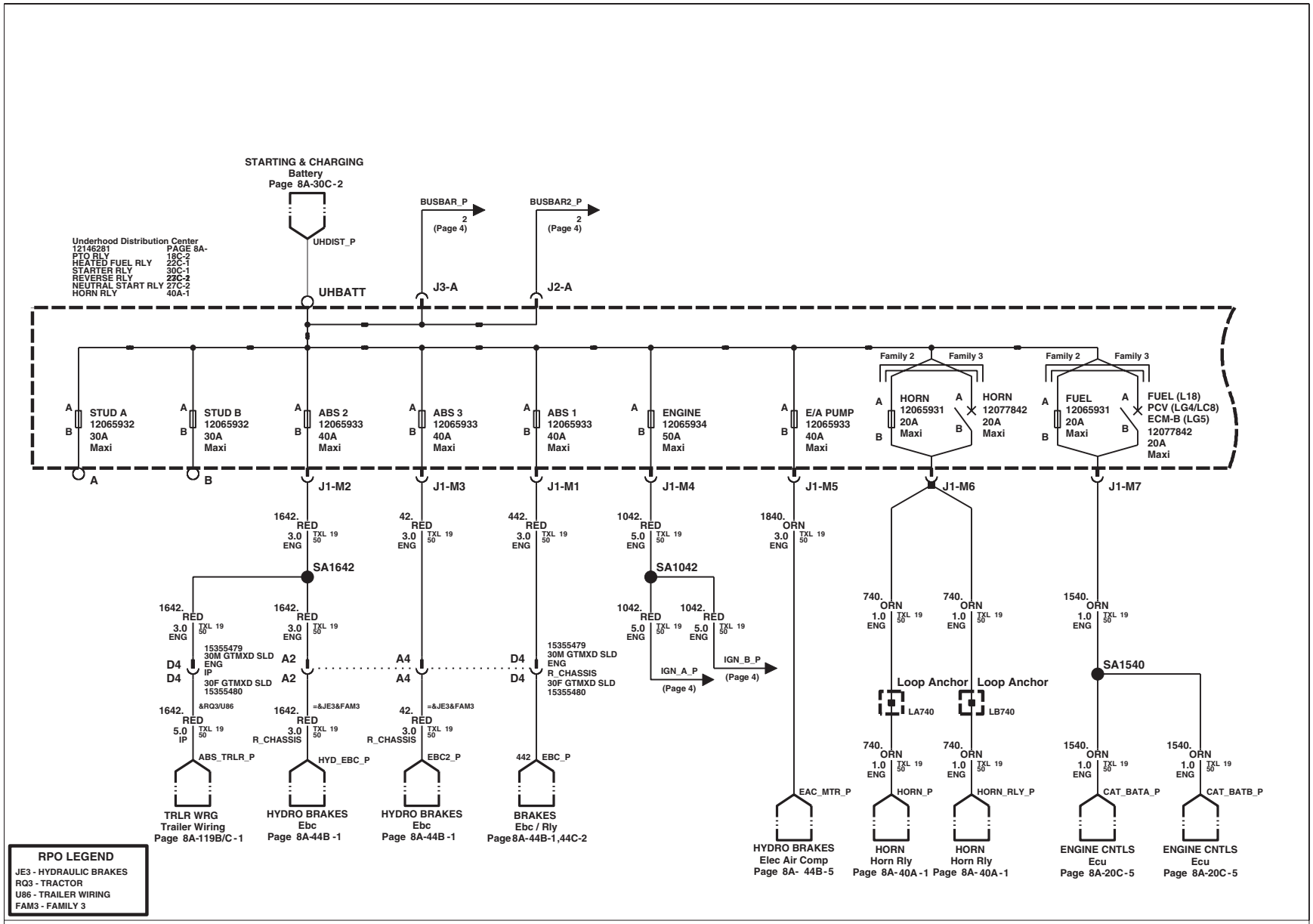
Power Distribution — (LG5) 7.2L-Diesel/CAT



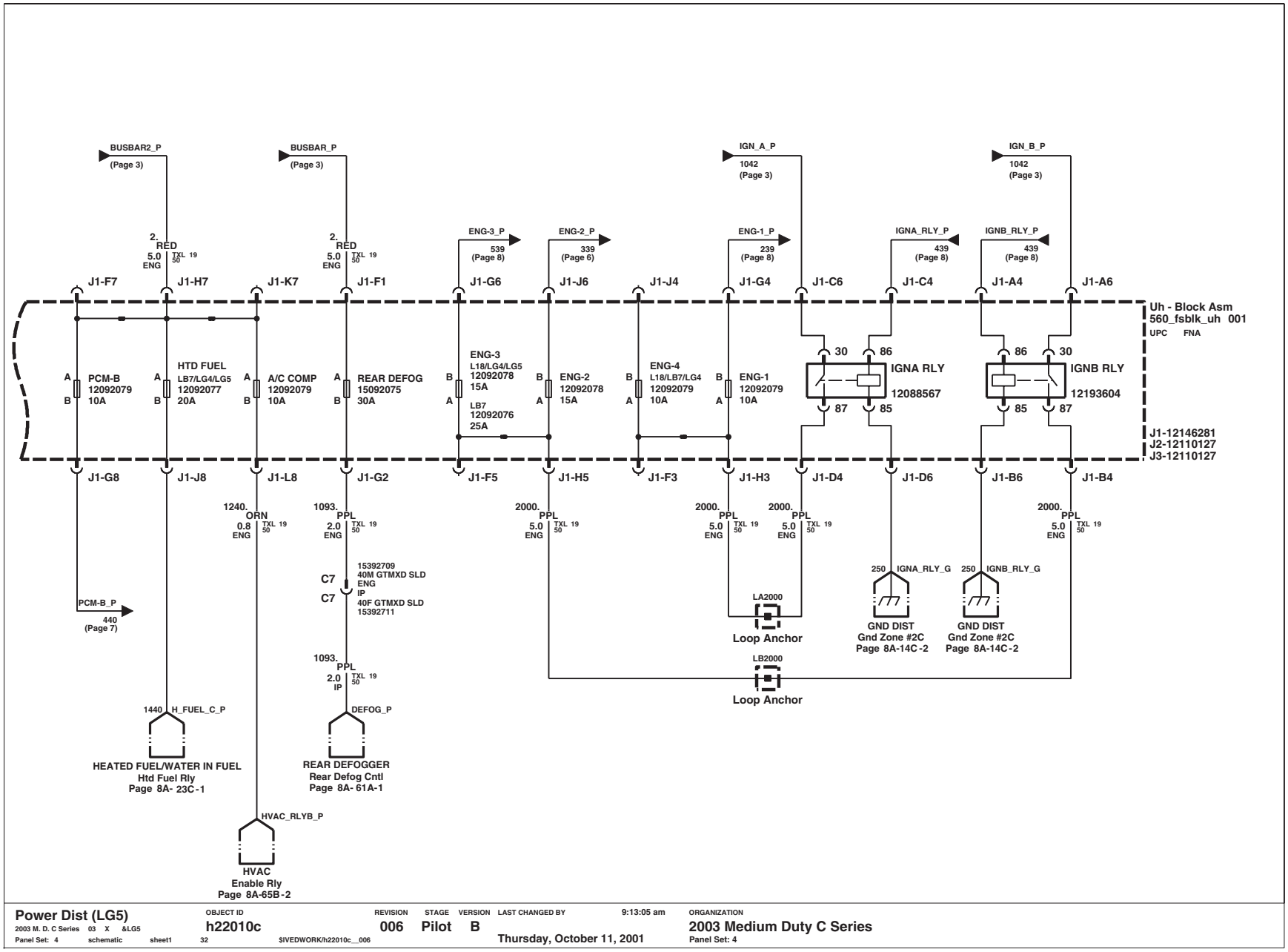
Power Distribution — (LG5) 7.2L-Diesel/CAT



Power Distribution — (LG5) 7.2L-Diesel/CAT



Power Distribution — (LG5) 7.2L-Diesel/CAT



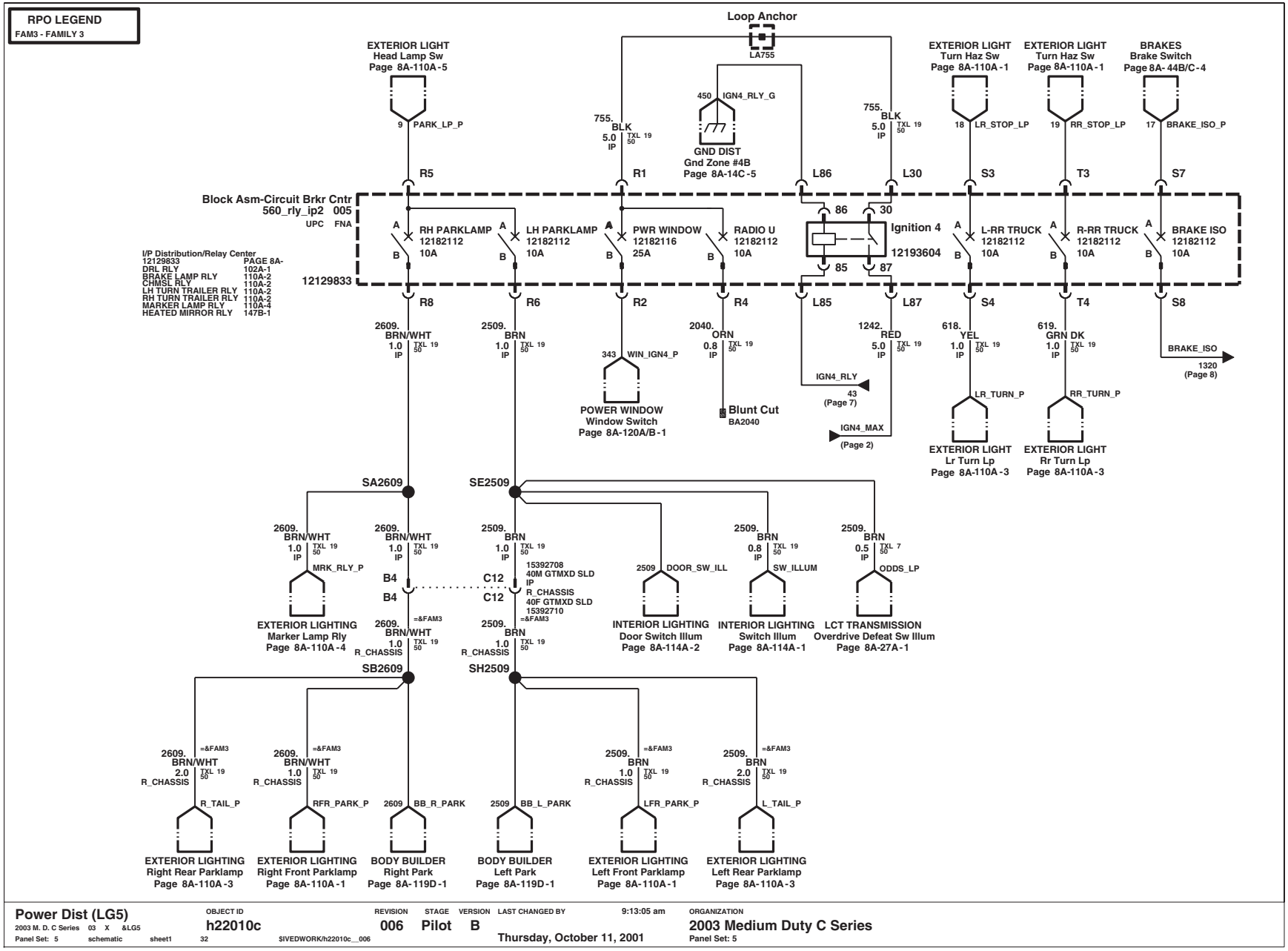
Power Dist (LG5)
2003 M. D. C Series 03 X &LG5
Panel Set: 4 schematic sheet1 32

OBJECT ID: h22010c
$IVEDWORK/h22010c__006

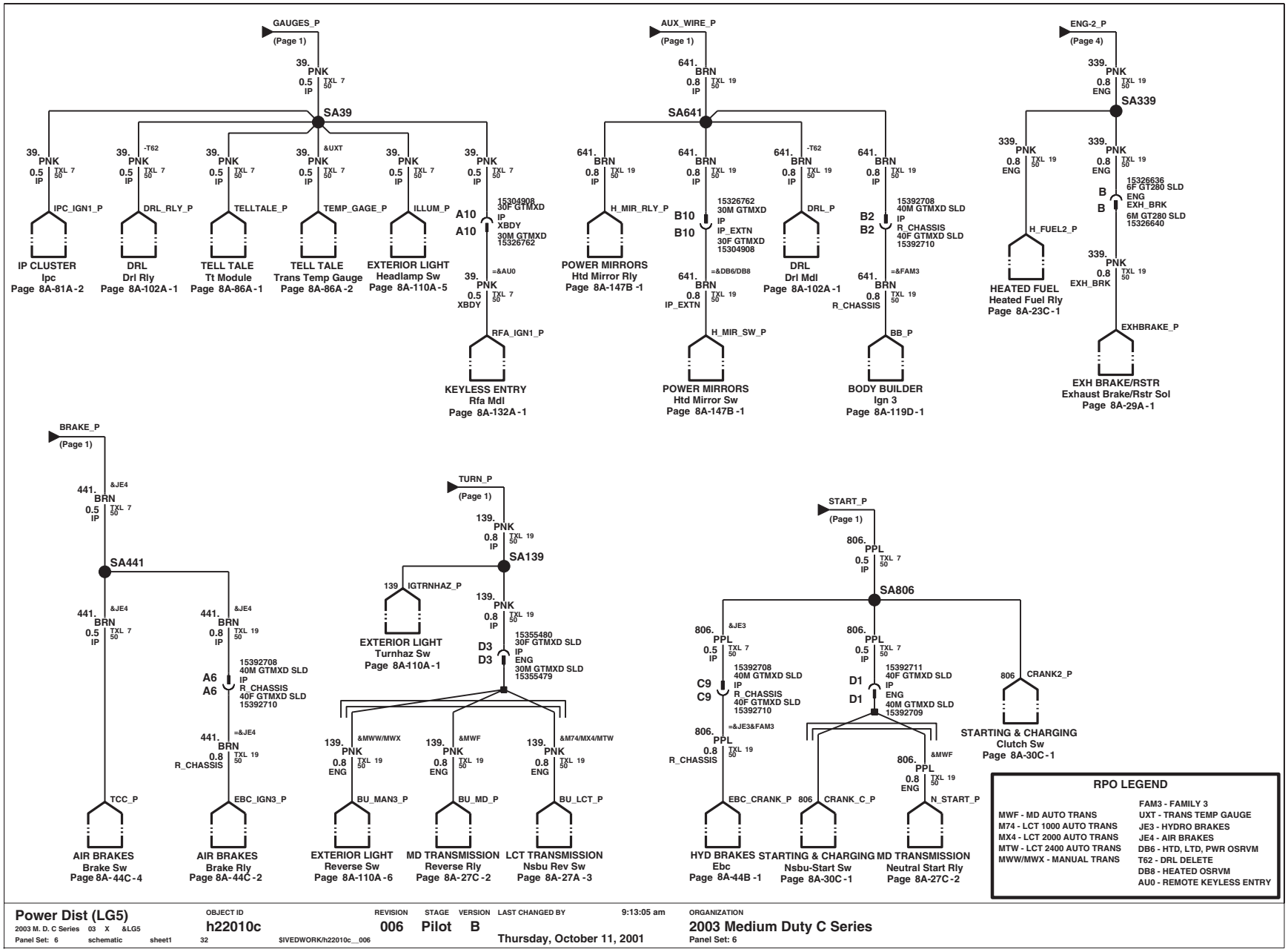
REVISION: 006
STAGE: Pilot
VERSION: B
LAST CHANGED BY:
9:13:05 am Thursday, October 11, 2001

ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 4

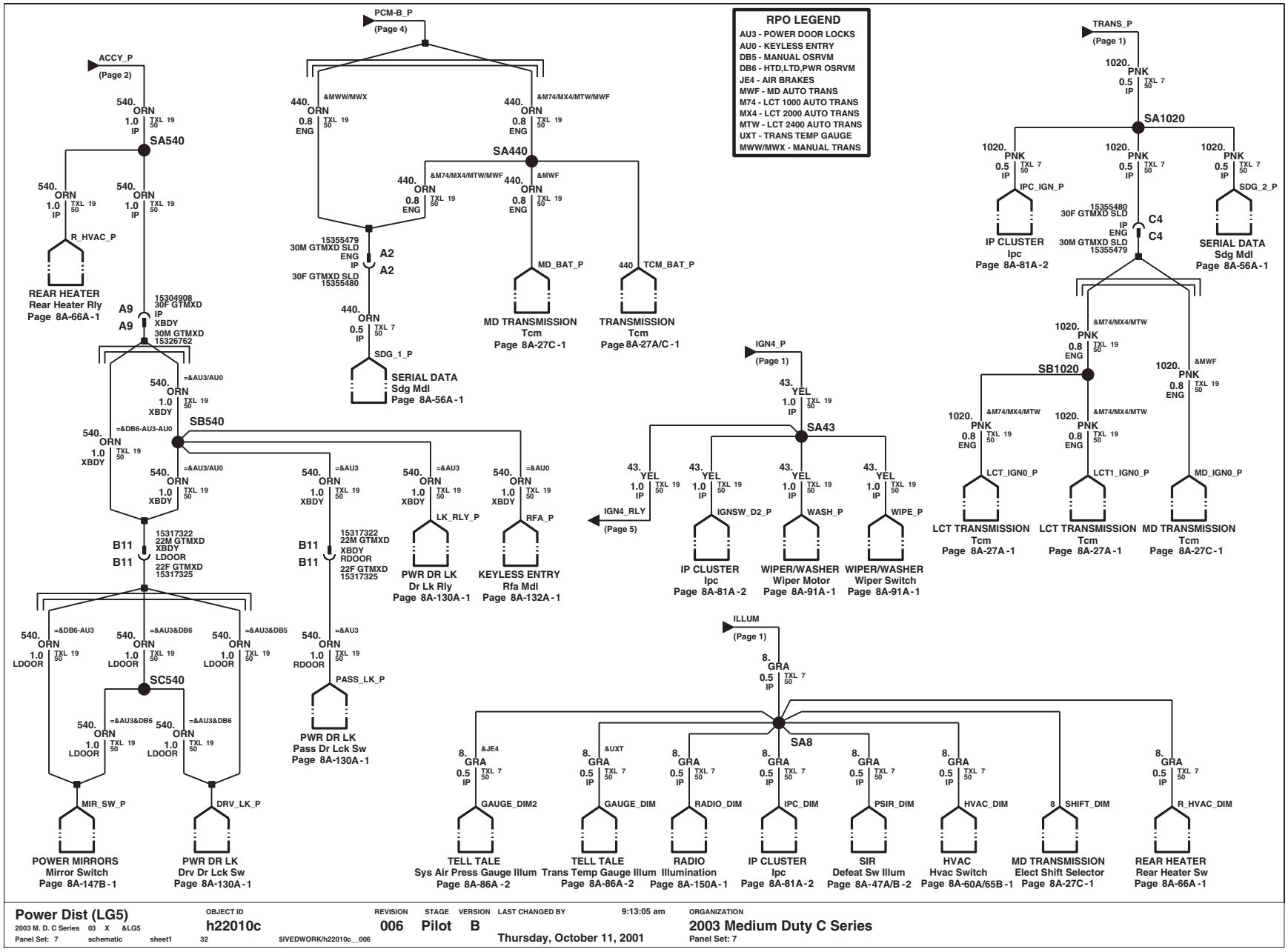
Power Distribution — (LG5) 7.2L-Diesel/CAT



Power Distribution — (LG5) 7.2L-Diesel/CAT

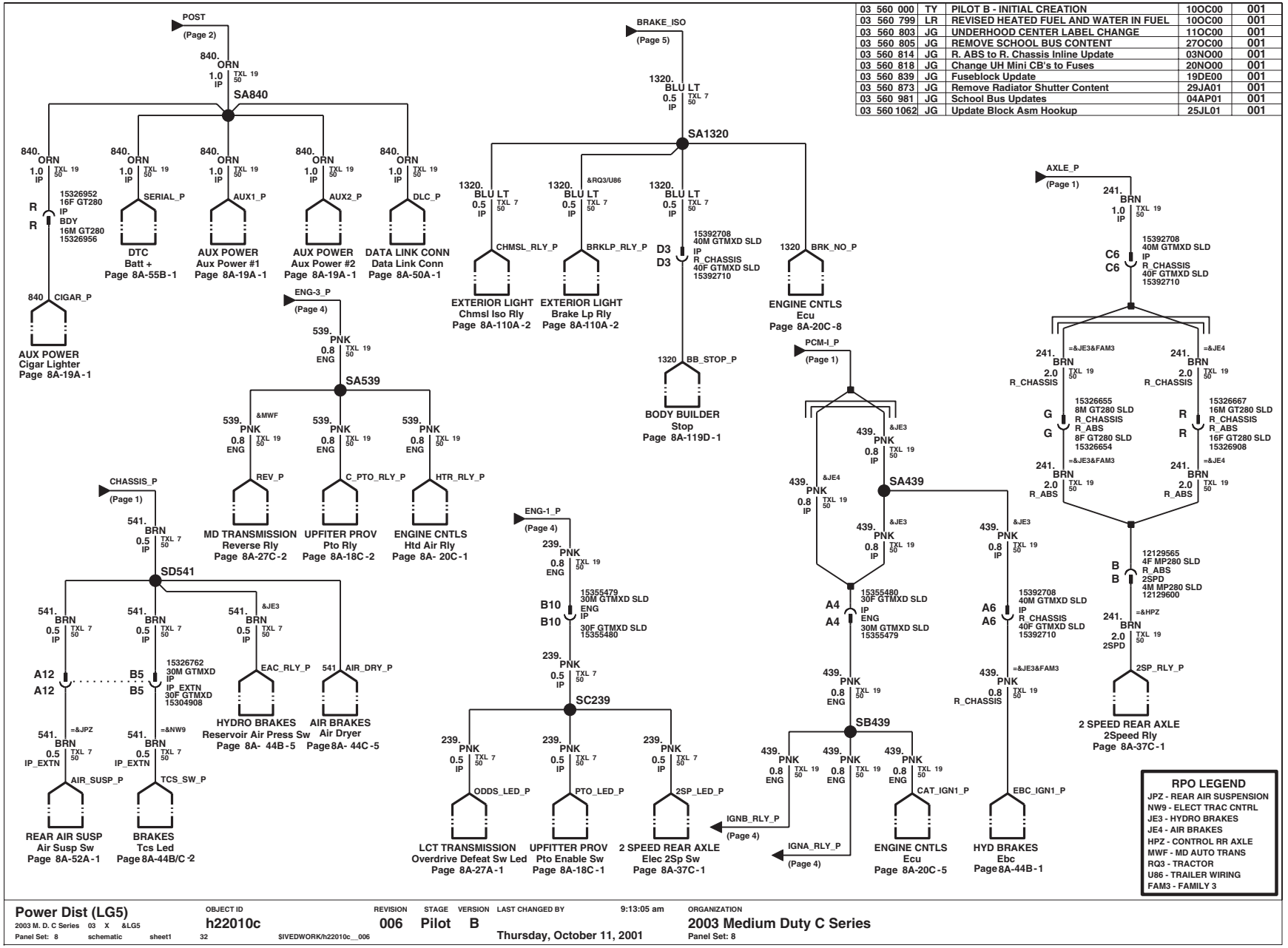

GAUGES_P
(Page 1)
39. PNK 0.5 IP TXL 7 50
SA39
39. PNK 0.5 IP TXL 7 50 IPC_IGN1_P
IP CLUSTER
Ipc
Page 8A-81A-2
39. -T62 PNK 0.5 IP TXL 7 50 DRL_RLY_P
DRL
Drl Rly
Page 8A-102A-1
39. PNK 0.5 IP TXL 7 50 TELLTALE_P
TELL TALE
Tt Module
Page 8A-86A-1
39. &UXT PNK 0.5 IP TXL 7 50 TEMP_GAGE_P
TELL TALE
Trans Temp Gauge
Page 8A-86A-2
39. PNK 0.5 IP TXL 7 50 ILLUM_P
EXTERIOR LIGHT
Headlamp Sw
Page 8A-110A-5
39. PNK 0.5 IP TXL 7 50
A10 A10 15304908 30F GTMXD IP XBDY 30M GTMXD 15326762
39. =&AU0 PNK 0.5 XBDY TXL 7 50 RFA_IGN1_P
KEYLESS ENTRY
Rfa Mdl
Page 8A-132A-1
AUX_WIRE_P
(Page 1)
641. BRN 0.8 IP TXL 19 50
SA641
641. BRN 0.8 IP TXL 19 50 H_MIR_RLY_P
POWER MIRRORS
Htd Mirror Rly
Page 8A-147B-1
641. BRN 0.8 IP TXL 19 50
B10 B10 15326762 30M GTMXD IP IP_EXTN 30F GTMXD 15304908
641. =&DB6/DB8 BRN 0.8 IP_EXTN TXL 19 50 H_MIR_SW_P
POWER MIRRORS
Htd Mirror Sw
Page 8A-147B-1
641. -T62 BRN 0.8 IP TXL 19 50 DRL_P
DRL
Drl Mdl
Page 8A-102A-1
641. BRN 0.8 IP TXL 19 50
B2 B2 15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
641. =&FAM3 BRN 0.8 R_CHASSIS TXL 19 50 BB_P
BODY BUILDER
Ign 3
Page 8A-119D-1
ENG-2_P
(Page 4)
339. PNK 0.8 ENG TXL 19 50
SA339
339. PNK 0.8 ENG TXL 19 50 H_FUEL2_P
HEATED FUEL
Heated Fuel Rly
Page 8A-23C-1
339. PNK 0.8 ENG TXL 19 50
B B 15326636 6F GT280 SLD ENG EXH_BRK 6M GT280 SLD 15326640
339. PNK 0.8 EXH_BRK TXL 19 50 EXHBRAKE_P
EXH BRAKE/RSTR
Exhaust Brake/Rstr Sol
Page 8A-29A-1
BRAKE_P
(Page 1)
441. &JE4 BRN 0.5 IP TXL 7 50
SA441
441. &JE4 BRN 0.5 IP TXL 7 50 TCC_P
AIR BRAKES
Brake Sw
Page 8A-44C-4
441. &JE4 BRN 0.8 IP TXL 19 50
A6 A6 15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
441. =&JE4 BRN 0.8 R_CHASSIS TXL 19 50 EBC_IGN3_P
AIR BRAKES
Brake Rly
Page 8A-44C-2
TURN_P
(Page 1)
139. PNK 0.8 IP TXL 19 50
SA139
139 IGTRNHAZ_P
EXTERIOR LIGHT
Turnhaz Sw
Page 8A-110A-1
139. PNK 0.8 IP TXL 19 50
D3 D3 15355480 30F GTMXD SLD IP ENG 30M GTMXD SLD 15355479
139. &MWW/MWX PNK 0.8 ENG TXL 19 50 BU_MAN3_P
EXTERIOR LIGHT
Reverse Sw
Page 8A-110A-6
139. &MWF PNK 0.8 ENG TXL 19 50 BU_MD_P
MD TRANSMISSION
Reverse Rly
Page 8A-27C-2
139. &M74/MX4/MTW PNK 0.8 ENG TXL 19 50 BU_LCT_P
LCT TRANSMISSION
Nsbu Rev Sw
Page 8A-27A-3
START_P
(Page 1)
806. PPL 0.5 IP TXL 7 50
SA806
806. &JE3 PPL 0.5 IP TXL 7 50
C9 C9 15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
806. =&JE3&FAM3 PPL 0.8 R_CHASSIS TXL 19 50 EBC_CRANK_P
HYD BRAKES
Ebc
Page 8A-44B-1
806. PPL 0.5 IP TXL 7 50
D1 D1 15392711 40F GTMXD SLD IP ENG 40M GTMXD SLD 15392709
806 CRANK_C_P
STARTING & CHARGING
Nsbu-Start Sw
Page 8A-30C-1
806. &MWF PPL 0.8 ENG TXL 19 50 N_START_P
MD TRANSMISSION
Neutral Start Rly
Page 8A-27C-2
806 CRANK2_P
STARTING & CHARGING
Clutch Sw
Page 8A-30C-1
RPO LEGEND
MWF - MD AUTO TRANS
M74 - LCT 1000 AUTO TRANS
MX4 - LCT 2000 AUTO TRANS
MTW - LCT 2400 AUTO TRANS
MWW/MWX - MANUAL TRANS
FAM3 - FAMILY 3
UXT - TRANS TEMP GAUGE
JE3 - HYDRO BRAKES
JE4 - AIR BRAKES
DB6 - HTD, LTD, PWR OSRVM
T62 - DRL DELETE
DB8 - HEATED OSRVM
AU0 - REMOTE KEYLESS ENTRY
Power Dist (LG5)
2003 M. D. C Series 03 X &LG5
Panel Set: 6 schematic sheet1 32
OBJECT ID h22010c
$IVEDWORK/h22010c__006
REVISION 006
STAGE Pilot
VERSION B
LAST CHANGED BY
9:13:05 am
Thursday, October 11, 2001
ORGANIZATION
2003 Medium Duty C Series
Panel Set: 6

Power Distribution — (LG5) 7.2L-Diesel/CAT



Power Distribution — (LG5) 7.2L-Diesel/CAT

03 560 000	TY	PILOT B - INITIAL CREATION	10OC00	001
03 560 799	LR	REVISED HEATED FUEL AND WATER IN FUEL	10OC00	001
03 560 803	JG	UNDERHOOD CENTER LABEL CHANGE	11OC00	001
03 560 805	JG	REMOVE SCHOOL BUS CONTENT	27OC00	001
03 560 814	JG	R. ABS to R. Chassis Inline Update	03NO00	001
03 560 818	JG	Change UH Mini CB's to Fuses	20NO00	001
03 560 839	JG	Fuseblock Update	19DE00	001
03 560 873	JG	Remove Radiator Shutter Content	29JA01	001
03 560 981	JG	School Bus Updates	04AP01	001
03 560 1062	JG	Update Block Asm Hookup	25JL01	001



Power Dist (LG5)
2003 M. D. C Series 03 X &LG5
Panel Set: 8 schematic sheet1 32

OBJECT ID: h22010c
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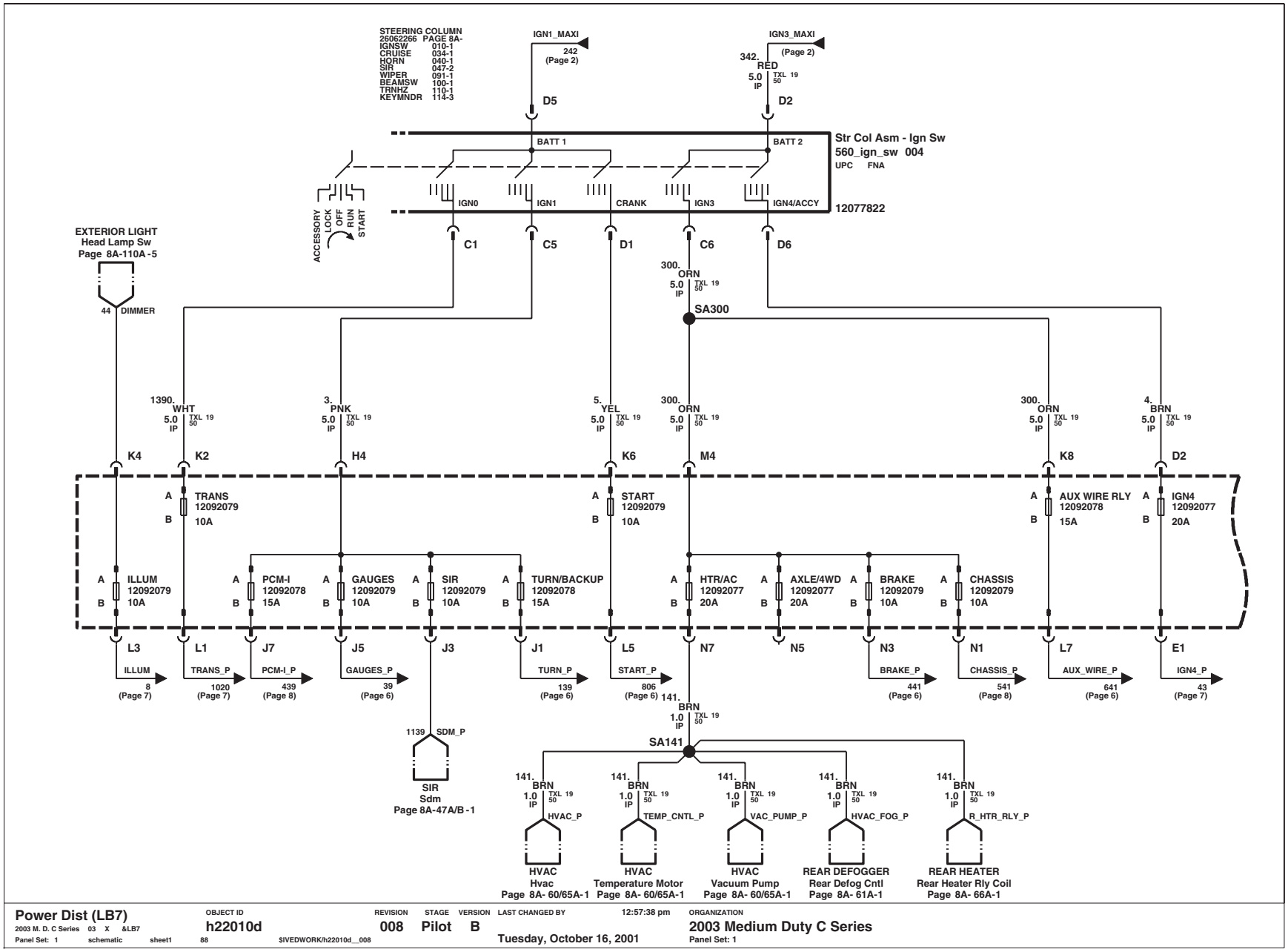
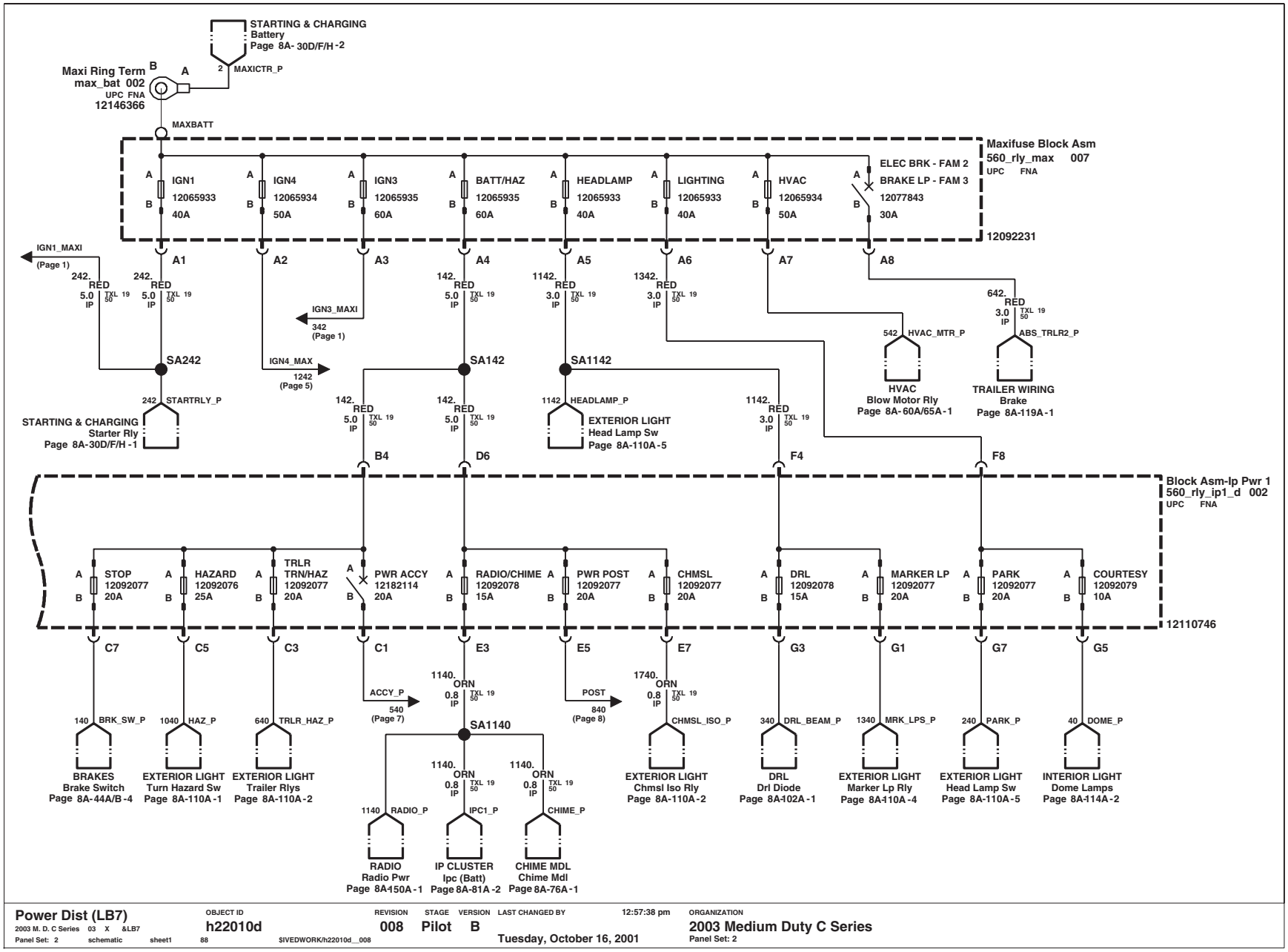
REVISION: 006
STAGE: Pilot
VERSION: B
LAST CHANGED BY: Thursday, October 11, 2001
9:13:05 am

ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 8

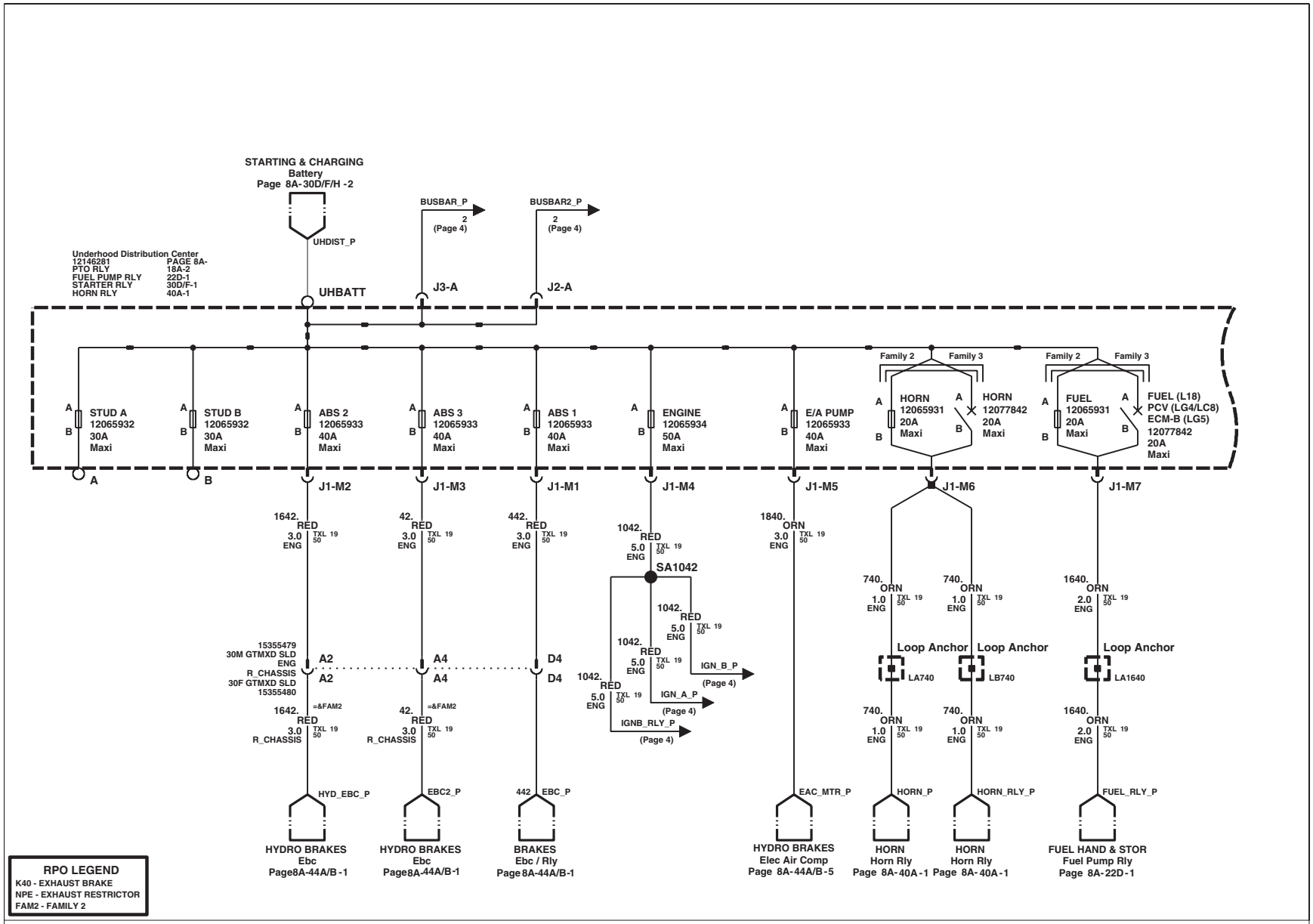
Power Distribution — (LB7) 6.6L-Diesel/Duramax



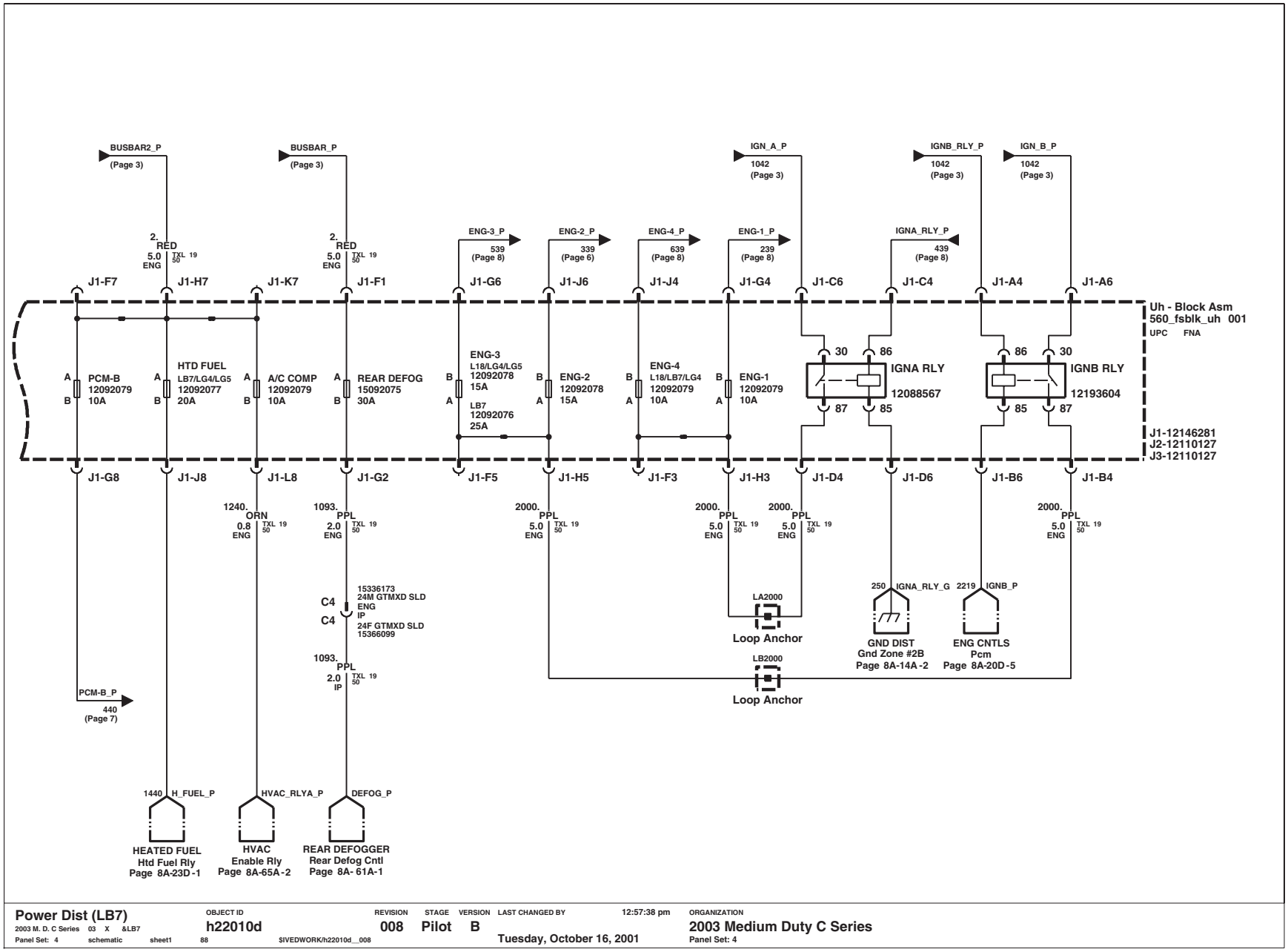
Power Distribution — (LB7) 6.6L-Diesel/Duramax



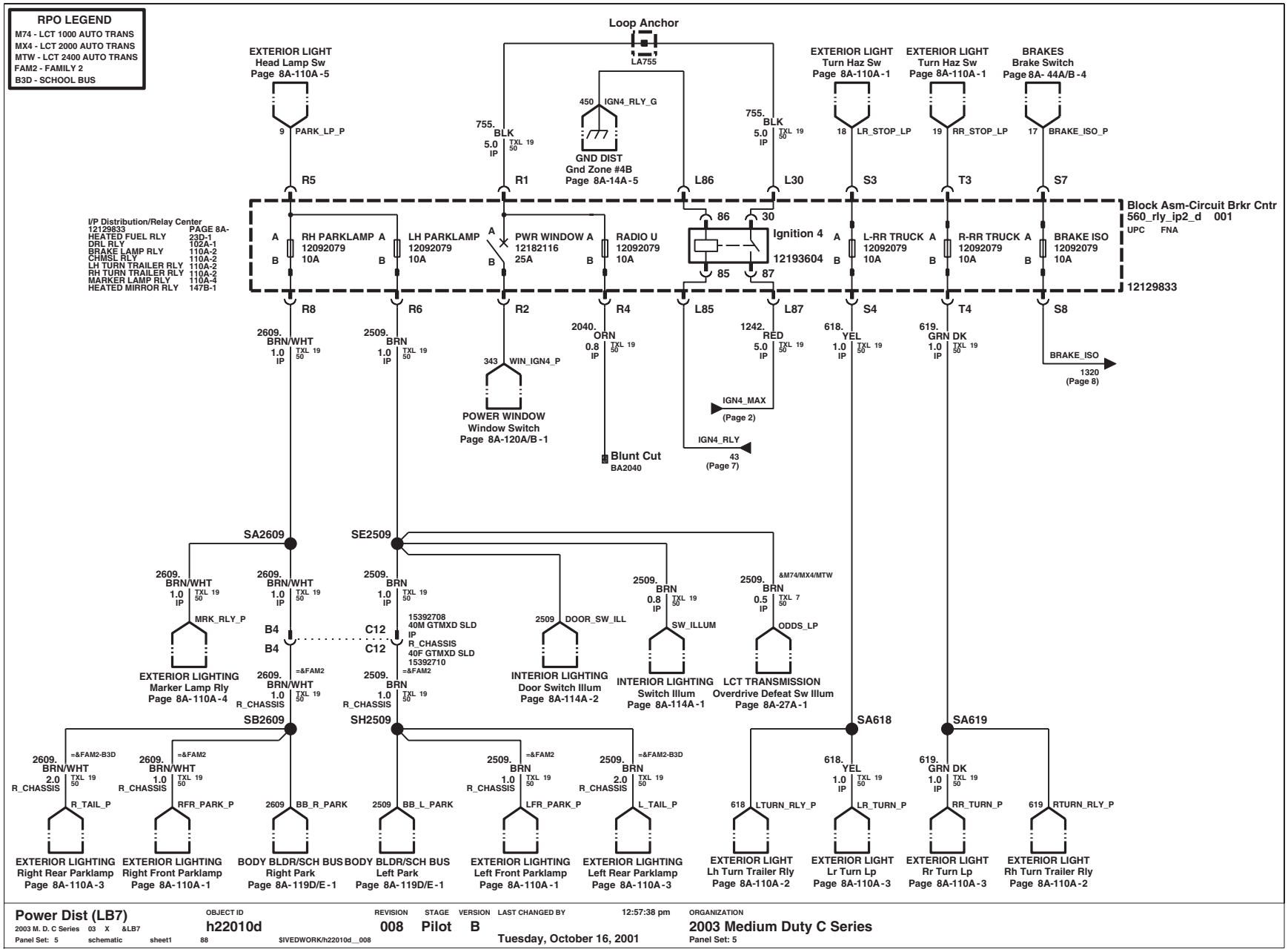
Power Distribution — (LB7) 6.6L-Diesel/Duramax



Power Distribution — (LB7) 6.6L-Diesel/Duramax



Power Distribution — (LB7) 6.6L-Diesel/Duramax


RPO LEGEND
M74 - LCT 1000 AUTO TRANS
MX4 - LCT 2000 AUTO TRANS
MTW - LCT 2400 AUTO TRANS
FAM2 - FAMILY 2
B3D - SCHOOL BUS
Loop Anchor
LA755
EXTERIOR LIGHT Head Lamp Sw Page 8A-110A-5
EXTERIOR LIGHT Turn Haz Sw Page 8A-110A-1
EXTERIOR LIGHT Turn Haz Sw Page 8A-110A-1
BRAKES Brake Switch Page 8A-44A/B-4
GND DIST Gnd Zone #4B Page 8A-14A-5
I/P Distribution/Relay Center 12129833
HEATED FUEL RLY 23D-1
DRL RLY 102A-1
BRAKE LAMP RLY 110A-2
CHMSL RLY 110A-2
LH TURN TRAILER RLY 110A-2
RH TURN TRAILER RLY 110A-2
MARKER LAMP RLY 110A-4
HEATED MIRROR RLY 147B-1
RH PARKLAMP 12092079 10A
LH PARKLAMP 12092079 10A
PWR WINDOW 12182116 25A
RADIO U 12092079 10A
Ignition 4 12193604
L-RR TRUCK 12092079 10A
R-RR TRUCK 12092079 10A
BRAKE ISO 12092079 10A
Block Asm-Circuit Brkr Cntr 560_rly_ip2_d 001 UPC FNA
12129833
POWER WINDOW Window Switch Page 8A-120A/B-1
Blunt Cut BA2040
IGN4_MAX (Page 2)
IGN4_RLY 43 (Page 7)
BRAKE_ISO 1320 (Page 8)
SA2609
SE2509
SB2609
SH2509
SA618
SA619
EXTERIOR LIGHTING Marker Lamp Rly Page 8A-110A-4
INTERIOR LIGHTING Door Switch Illum Page 8A-114A-2
INTERIOR LIGHTING Switch Illum Page 8A-114A-1
LCT TRANSMISSION Overdrive Defeat Sw Illum Page 8A-27A-1
EXTERIOR LIGHTING Right Rear Parklamp Page 8A-110A-3
EXTERIOR LIGHTING Right Front Parklamp Page 8A-110A-1
BODY BLDR/SCH BUS Right Park Page 8A-119D/E-1
BODY BLDR/SCH BUS Left Park Page 8A-119D/E-1
EXTERIOR LIGHTING Left Front Parklamp Page 8A-110A-1
EXTERIOR LIGHTING Left Rear Parklamp Page 8A-110A-3
EXTERIOR LIGHT Lh Turn Trailer Rly Page 8A-110A-2
EXTERIOR LIGHT Lr Turn Lp Page 8A-110A-3
EXTERIOR LIGHT Rr Turn Lp Page 8A-110A-3
EXTERIOR LIGHT Rh Turn Trailer Rly Page 8A-110A-2
15392708 40M GTMXD SLD IP R_CHASSIS
15392710 40F GTMXD SLD IP R_CHASSIS
Power Dist (LB7)
OBJECT ID h22010d
REVISION 008
STAGE Pilot
VERSION B
LAST CHANGED BY
12:57:38 pm
Tuesday, October 16, 2001
ORGANIZATION 2003 Medium Duty C Series
2003 M. D. C Series 03 X &LB7
Panel Set: 5 schematic sheet1 88
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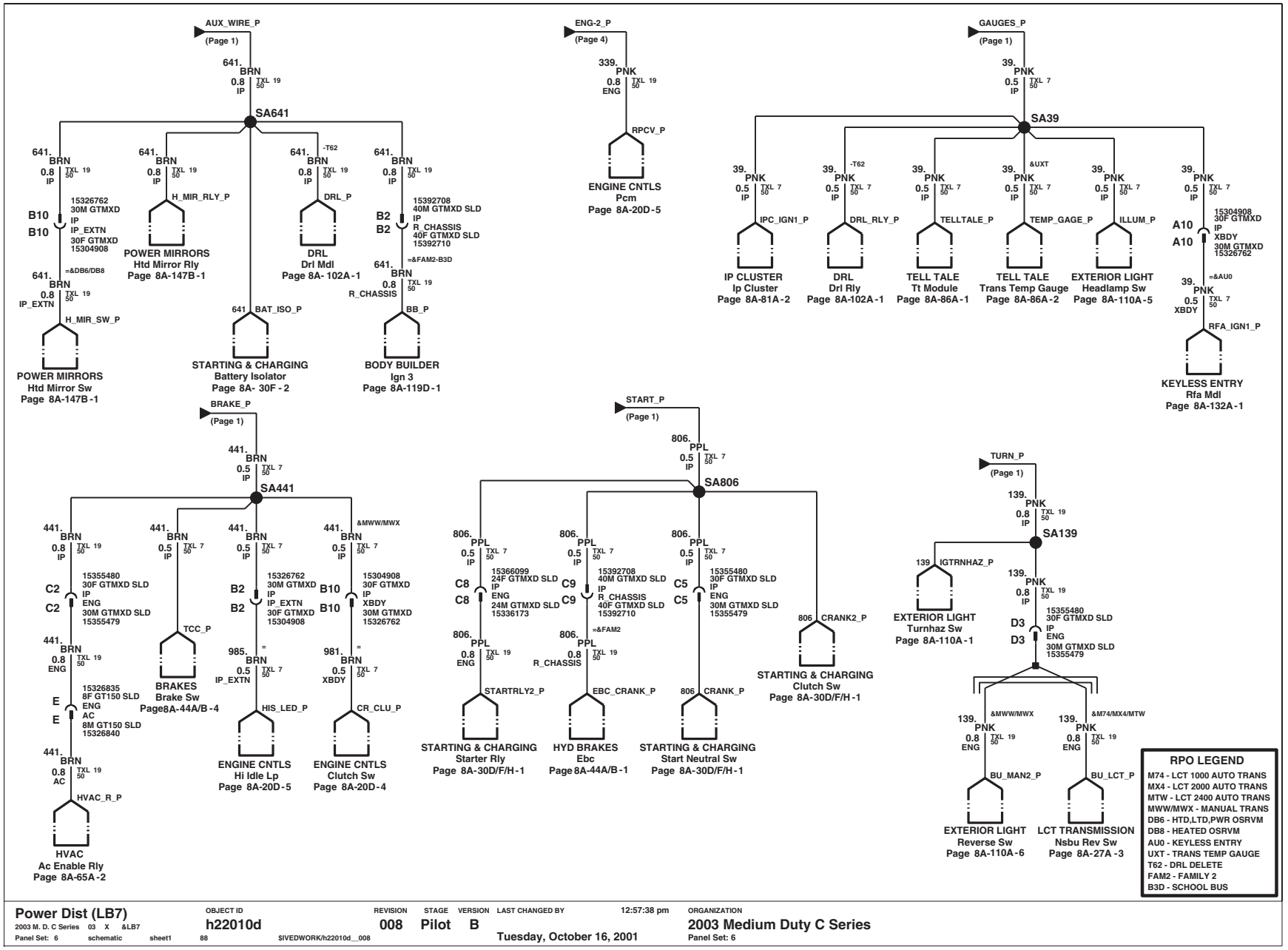
Panel Set: 5

Power Distribution — (LB7) 6.6L-Diesel/Duramax


AUX_WIRE_P (Page 1)
641. BRN 0.8 IP TXL 19 50
SA641
641. BRN 0.8 IP TXL 19 50 15326762 30M GTMXD IP IP_EXTN 30F GTMXD 15304908 B10 B10
641. BRN 0.8 IP TXL 19 50 H_MIR_RLY_P
POWER MIRRORS Htd Mirror Rly Page 8A-147B-1
641. BRN 0.8 IP TXL 19 50 -T62 DRL_P
DRL Drl Mdl Page 8A-102A-1
641. BRN 0.8 IP TXL 19 50 15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710 B2 B2 =&FAM2-B3D
641. BRN 0.8 R_CHASSIS TXL 19 50
BB_P
BODY BUILDER Ign 3 Page 8A-119D-1
641. BRN 0.8 IP_EXTN TXL 19 50 =&DB6/DB8
H_MIR_SW_P
POWER MIRRORS Htd Mirror Sw Page 8A-147B-1
641 BAT_ISO_P
STARTING & CHARGING Battery Isolator Page 8A-30F-2
ENG-2_P (Page 4)
339. PNK 0.8 ENG TXL 19 50
RPCV_P
ENGINE CNTLS Pcm Page 8A-20D-5
GAUGES_P (Page 1)
39. PNK 0.5 IP TXL 7 50
SA39
39. PNK 0.5 IP TXL 7 50 IPC_IGN1_P
IP CLUSTER Ip Cluster Page 8A-81A-2
39. PNK 0.5 IP TXL 7 50 -T62 DRL_RLY_P
DRL Drl Rly Page 8A-102A-1
39. PNK 0.5 IP TXL 7 50 TELLTALE_P
TELL TALE Tt Module Page 8A-86A-1
39. PNK 0.5 IP TXL 7 50 &UXT TEMP_GAGE_P
TELL TALE Trans Temp Gauge Page 8A-86A-2
39. PNK 0.5 IP TXL 7 50 ILLUM_P
EXTERIOR LIGHT Headlamp Sw Page 8A-110A-5
39. PNK 0.5 IP TXL 7 50 15304908 30F GTMXD IP XBDY 30M GTMXD 15326762 A10 A10
39. PNK 0.5 XBDY TXL 7 50 =&AU0
RFA_IGN1_P
KEYLESS ENTRY Rfa Mdl Page 8A-132A-1
BRAKE_P (Page 1)
441. BRN 0.5 IP TXL 7 50
SA441
441. BRN 0.8 IP TXL 19 50 15355480 30F GTMXD SLD IP ENG 30M GTMXD SLD 15355479 C2 C2
441. BRN 0.8 ENG TXL 19 50 15326835 8F GT150 SLD ENG AC 8M GT150 SLD 15326840 E E
441. BRN 0.8 AC TXL 19 50
HVAC_R_P
HVAC Ac Enable Rly Page 8A-65A-2
441. BRN 0.5 IP TXL 7 50 TCC_P
BRAKES Brake Sw Page 8A-44A/B-4
441. BRN 0.5 IP TXL 7 50 15326762 30M GTMXD IP IP_EXTN 30F GTMXD 15304908 B2 B2
985. BRN 0.5 IP_EXTN TXL 7 50 =
HIS_LED_P
ENGINE CNTLS Hi Idle Lp Page 8A-20D-5
441. BRN 0.5 IP TXL 7 50 &MWW/MWX 15304908 30F GTMXD IP XBDY 30M GTMXD 15326762 B10 B10
981. BRN 0.5 XBDY TXL 7 50 =
CR_CLU_P
ENGINE CNTLS Clutch Sw Page 8A-20D-4
START_P (Page 1)
806. PPL 0.5 IP TXL 7 50
SA806
806. PPL 0.5 IP TXL 7 50 15366099 24F GTMXD SLD IP ENG 24M GTMXD SLD 15336173 C8 C8
806. PPL 0.8 ENG TXL 19 50
STARTRLY2_P
STARTING & CHARGING Starter Rly Page 8A-30D/F/H-1
806. PPL 0.5 IP TXL 7 50 15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710 C9 C9
806. PPL 0.8 R_CHASSIS TXL 19 50 =&FAM2
EBC_CRANK_P
HYD BRAKES Ebc Page 8A-44A/B-1
806. PPL 0.5 IP TXL 7 50 15355480 30F GTMXD SLD IP ENG 30M GTMXD SLD 15355479 C5 C5
806 CRANK_P
STARTING & CHARGING Start Neutral Sw Page 8A-30D/F/H-1
806 CRANK2_P
STARTING & CHARGING Clutch Sw Page 8A-30D/F/H-1
TURN_P (Page 1)
139. PNK 0.8 IP TXL 19 50
SA139
139 IGTRNHAZ_P
EXTERIOR LIGHT Turnhaz Sw Page 8A-110A-1
139. PNK 0.8 IP TXL 19 50 15355480 30F GTMXD SLD IP ENG 30M GTMXD SLD 15355479 D3 D3
139. PNK 0.8 ENG TXL 19 50 &MWW/MWX
BU_MAN2_P
EXTERIOR LIGHT Reverse Sw Page 8A-110A-6
139. PNK 0.8 ENG TXL 19 50 &M74/MX4/MTW
BU_LCT_P
LCT TRANSMISSION Nsbu Rev Sw Page 8A-27A-3
RPO LEGEND
M74 - LCT 1000 AUTO TRANS
MX4 - LCT 2000 AUTO TRANS
MTW - LCT 2400 AUTO TRANS
MWW/MWX - MANUAL TRANS
DB6 - HTD,LTD,PWR OSRVM
DB8 - HEATED OSRVM
AU0 - KEYLESS ENTRY
UXT - TRANS TEMP GAUGE
T62 - DRL DELETE
FAM2 - FAMILY 2
B3D - SCHOOL BUS
Power Dist (LB7)
2003 M. D. C Series 03 X &LB7
Panel Set: 6 schematic sheet1 88
OBJECT ID h22010d
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REVISION 008
STAGE Pilot
VERSION B
LAST CHANGED BY
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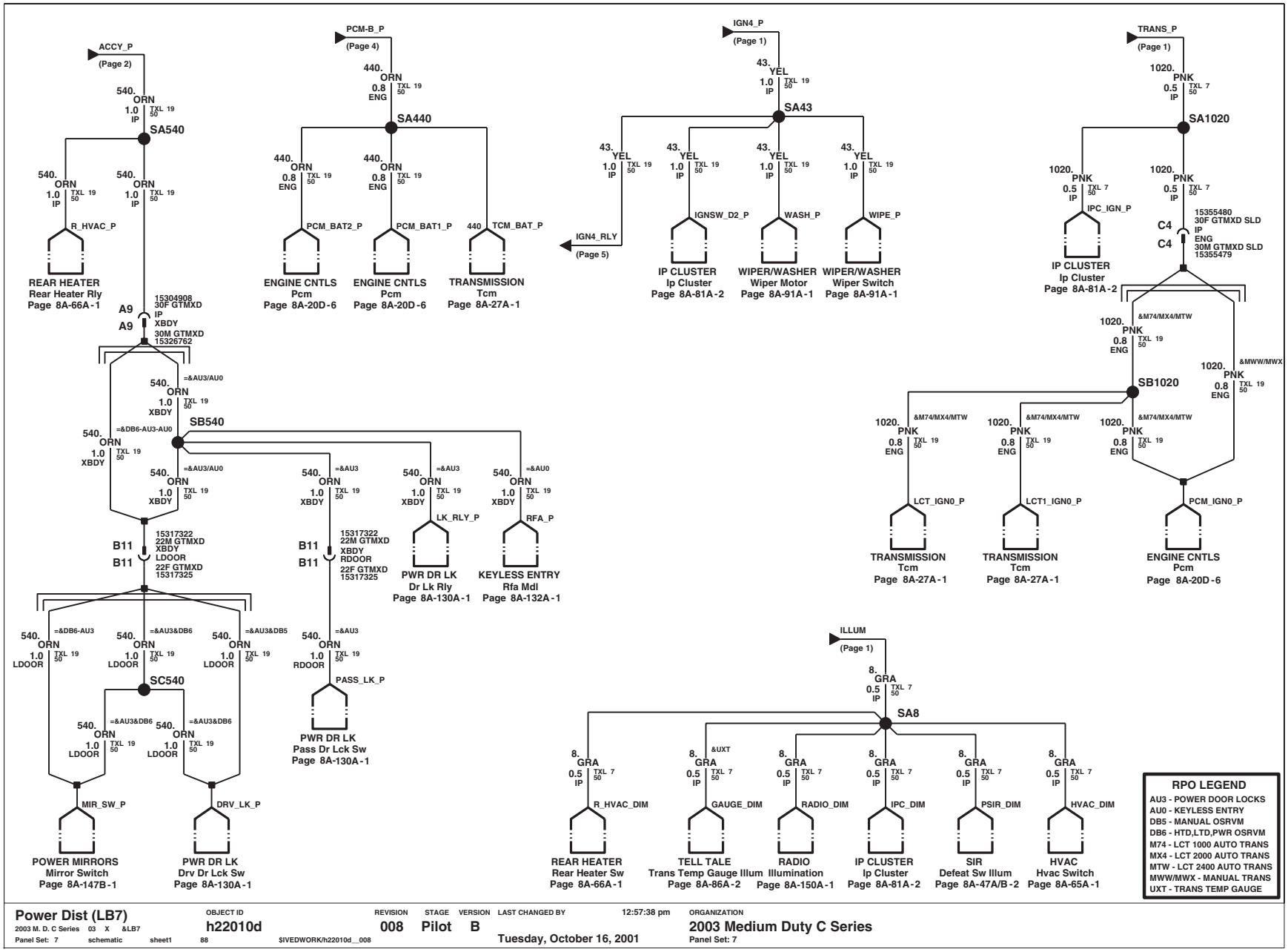
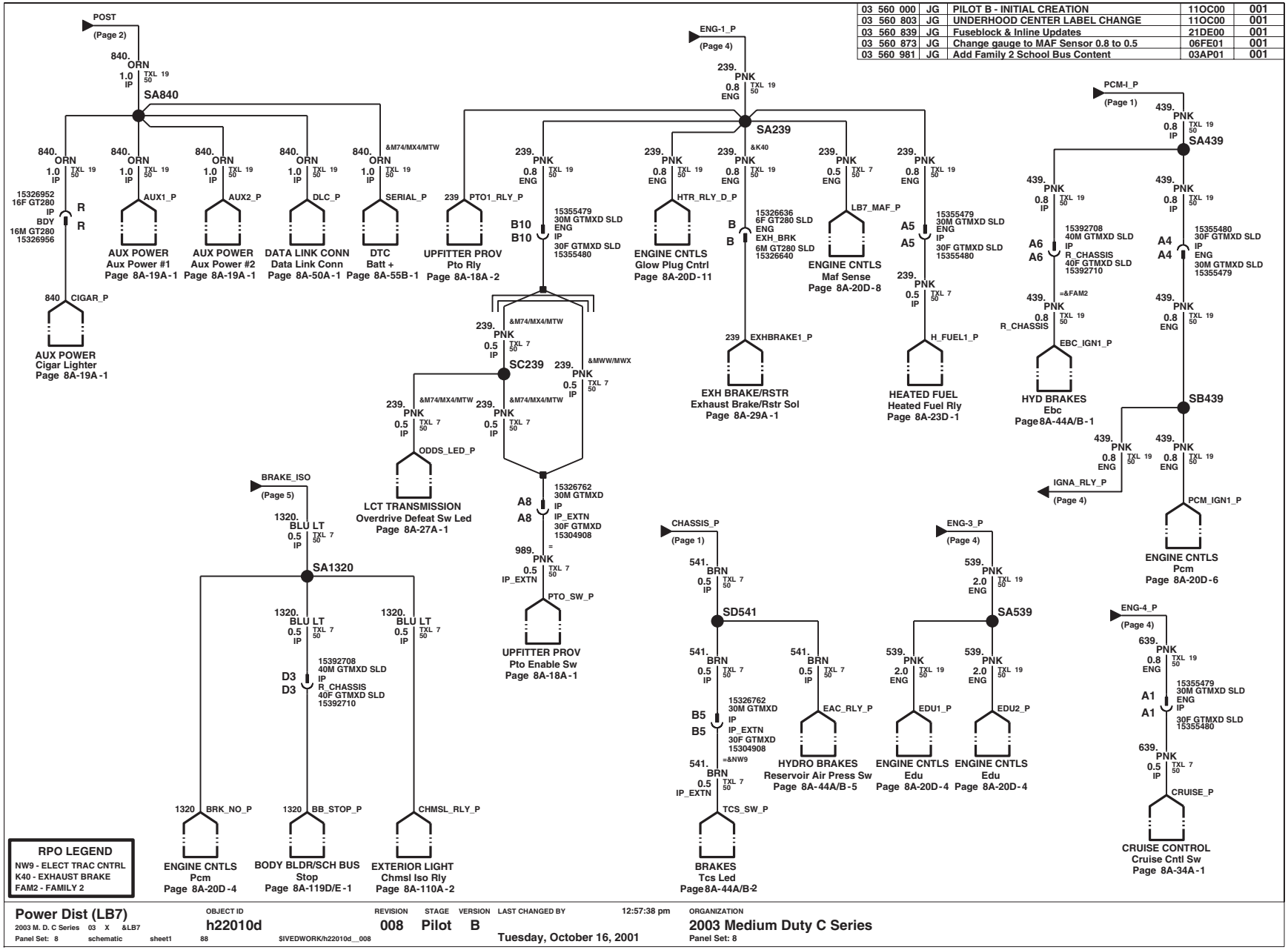
12:57:38 pm
ORGANIZATION 2003 Medium Duty C Series
Panel Set: 6

Power Distribution — (LB7) 6.6L-Diesel/Duramax

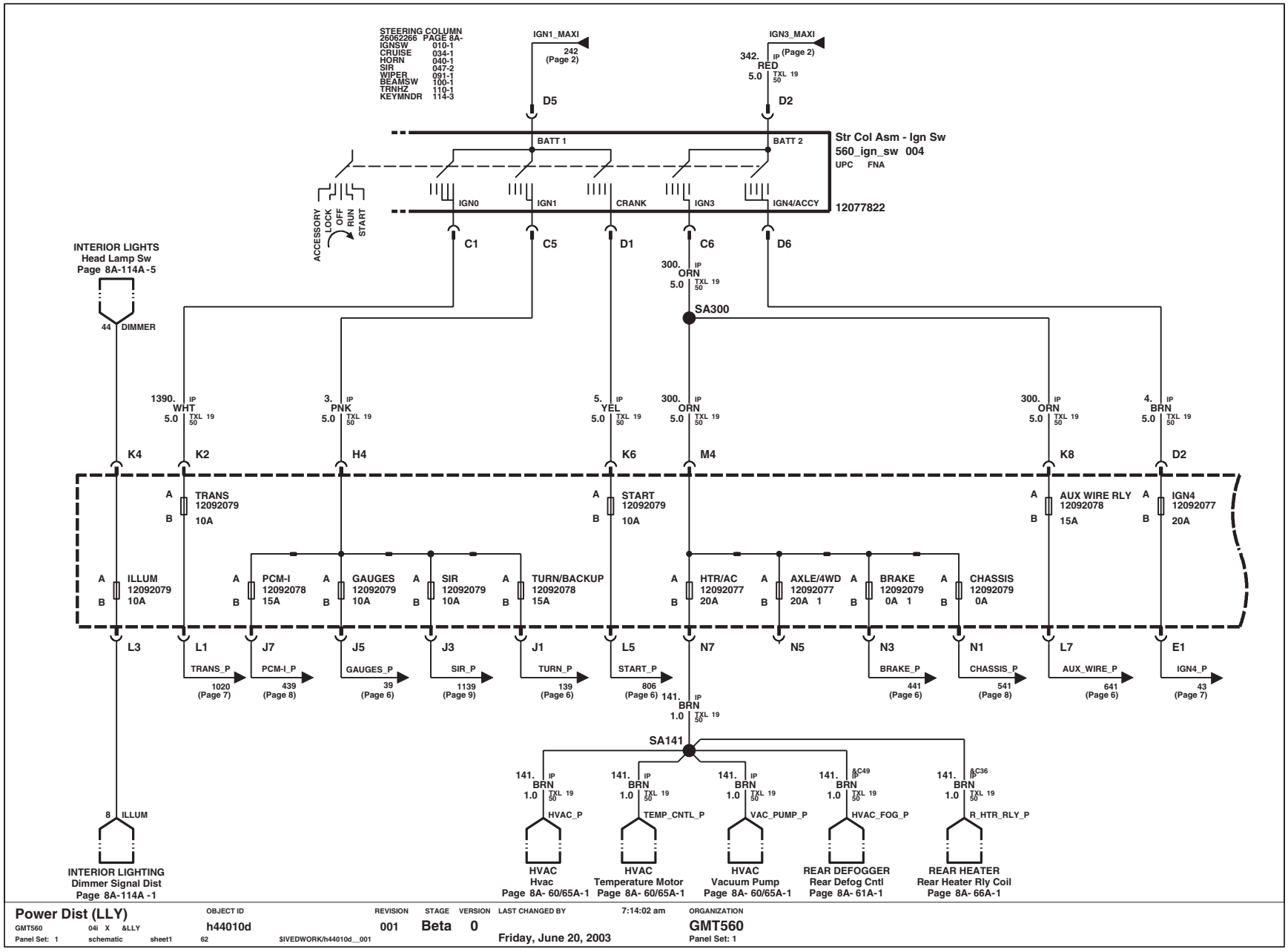


Power Distribution — (LB7) 6.6L-Diesel/Duramax

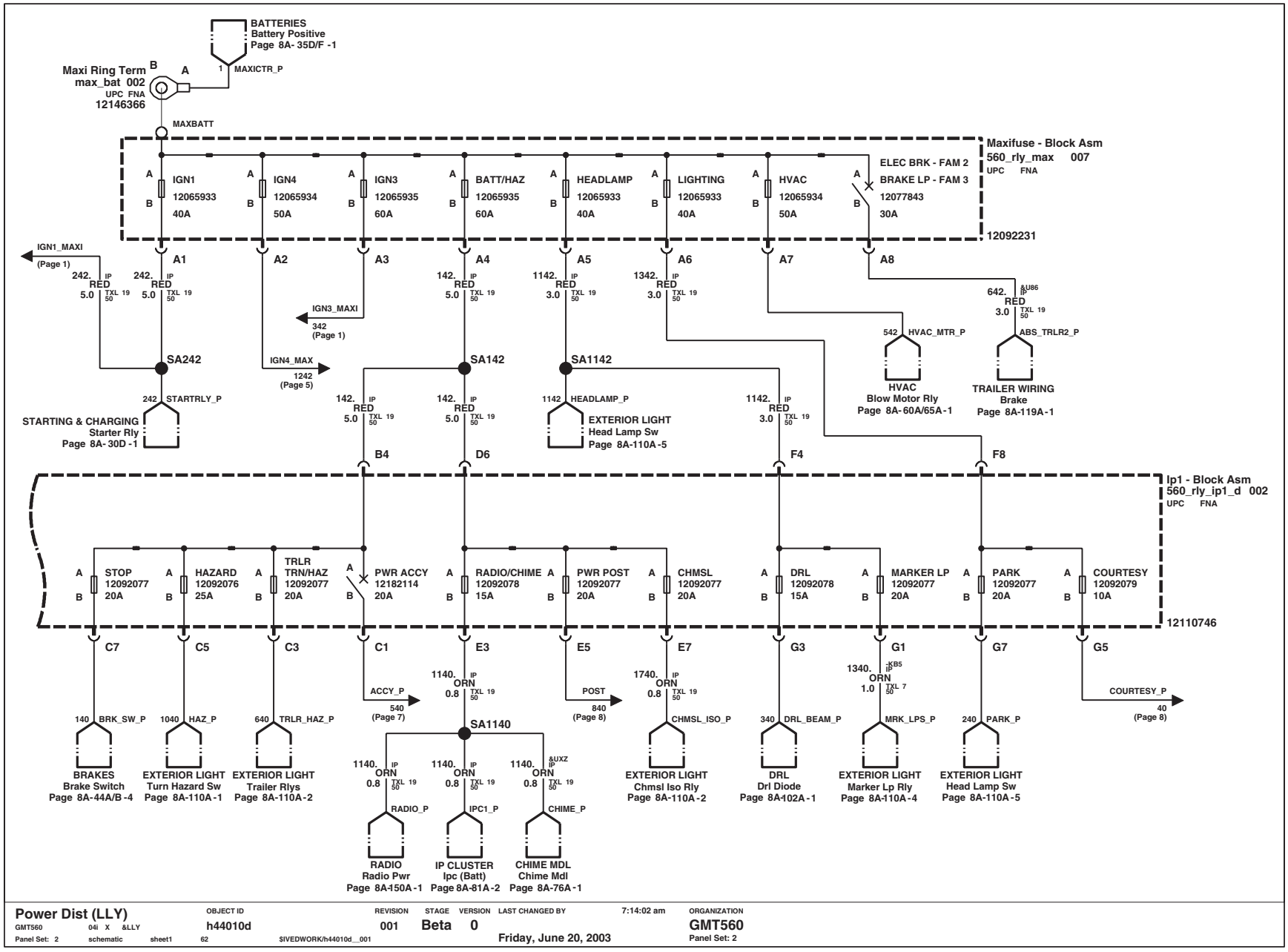
03 560 000	JG	PILOT B - INITIAL CREATION	11OC00	001
03 560 803	JG	UNDERHOOD CENTER LABEL CHANGE	11OC00	001
03 560 839	JG	Fuseblock & Inline Updates	21DE00	001
03 560 873	JG	Change gauge to MAF Sensor 0.8 to 0.5	06FE01	001
03 560 981	JG	Add Family 2 School Bus Content	03AP01	001



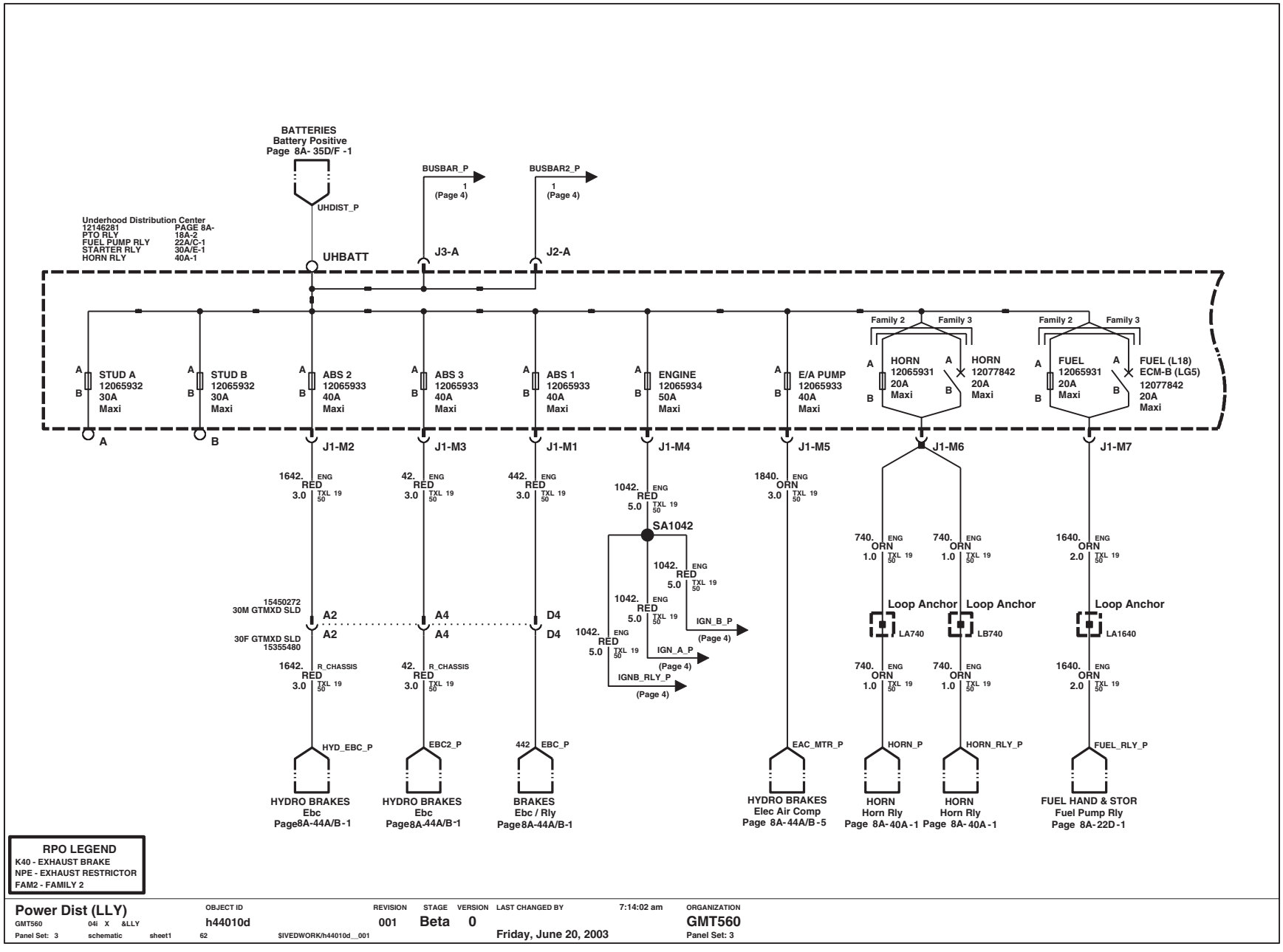
Power Distribution — (LLY) 6.6L-Diesel/Duramax



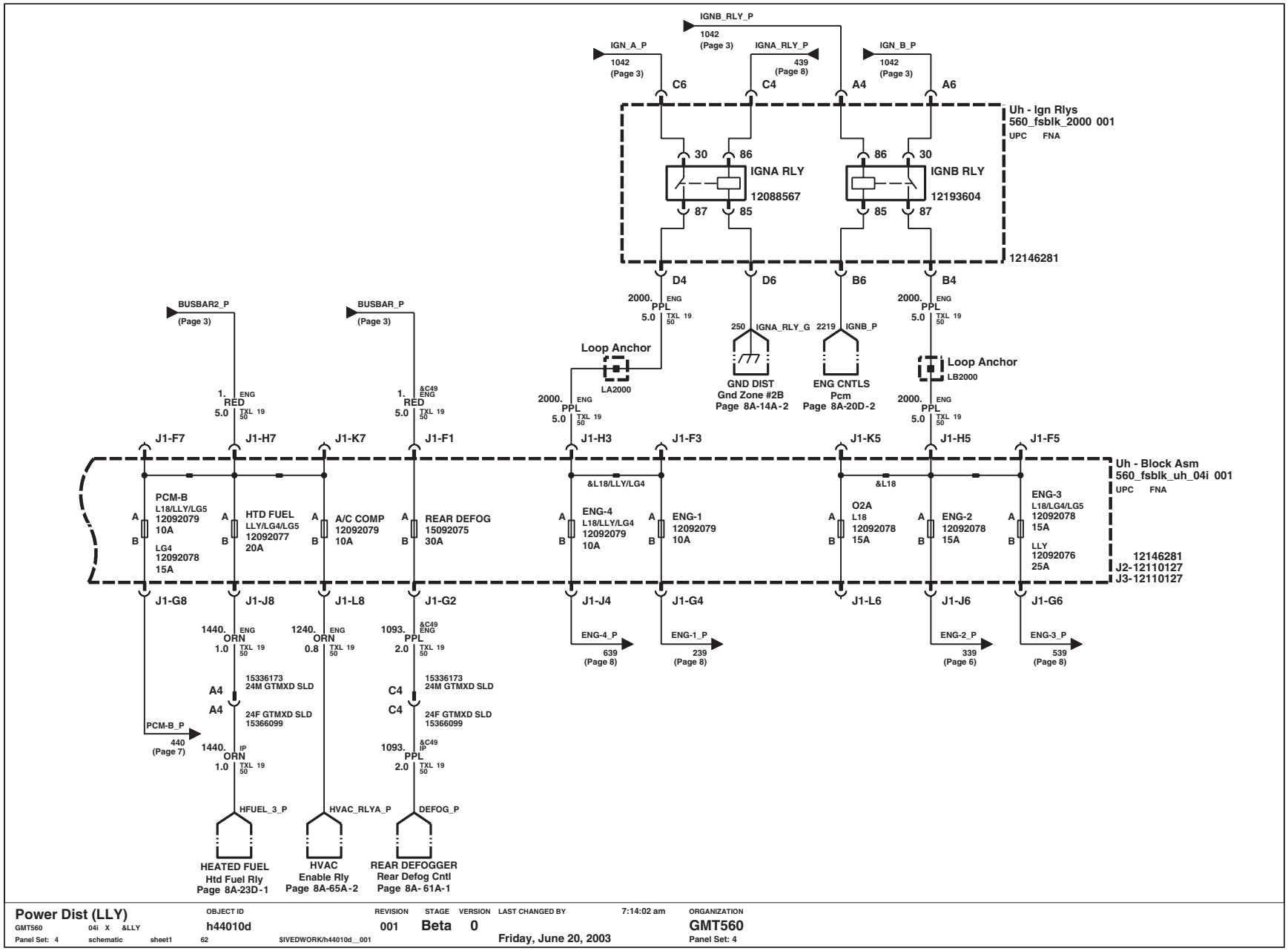
Power Distribution — (LLY) 6.6L-Diesel/Duramax



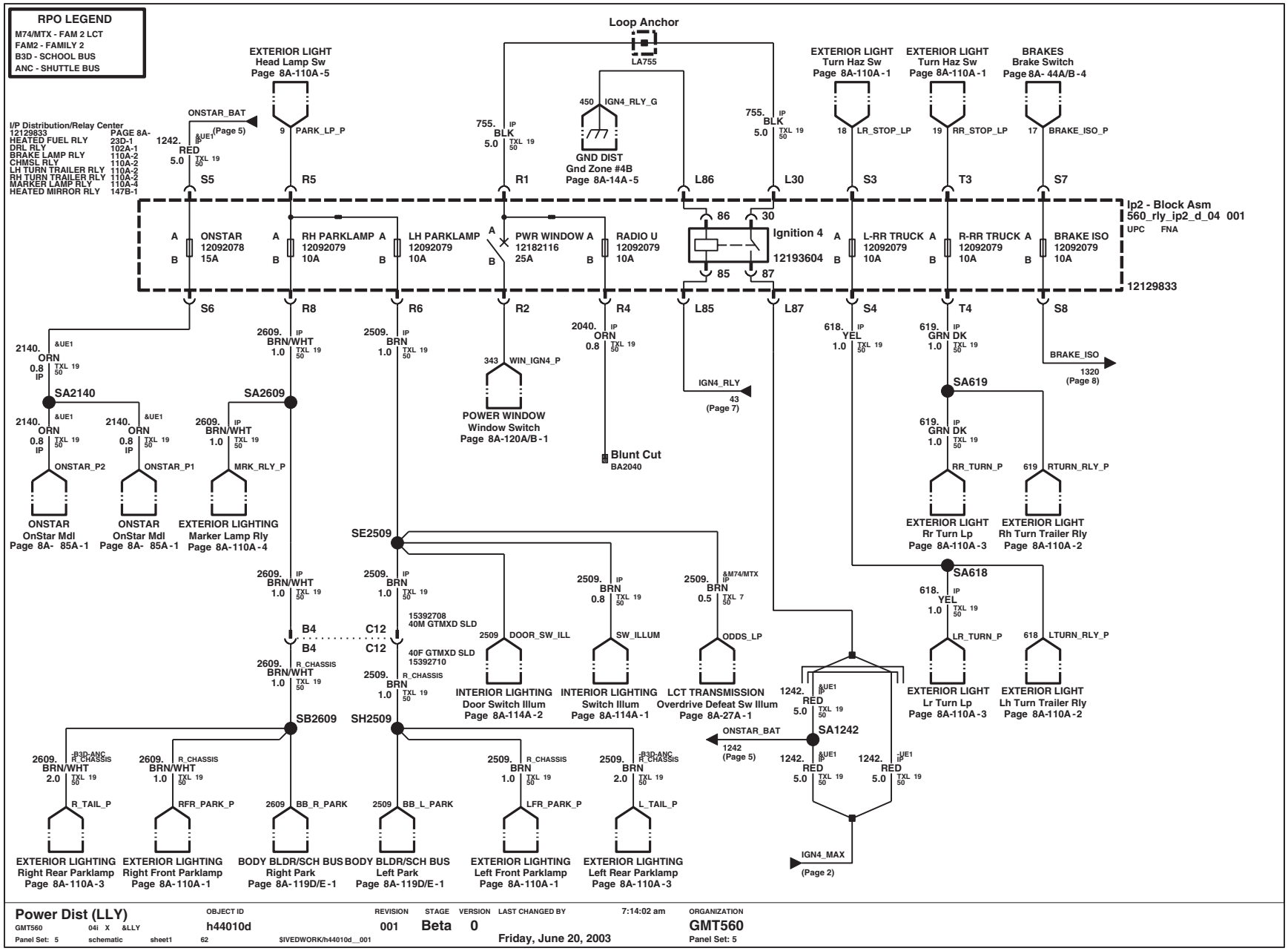
Power Distribution — (LLY) 6.6L-Diesel/Duramax



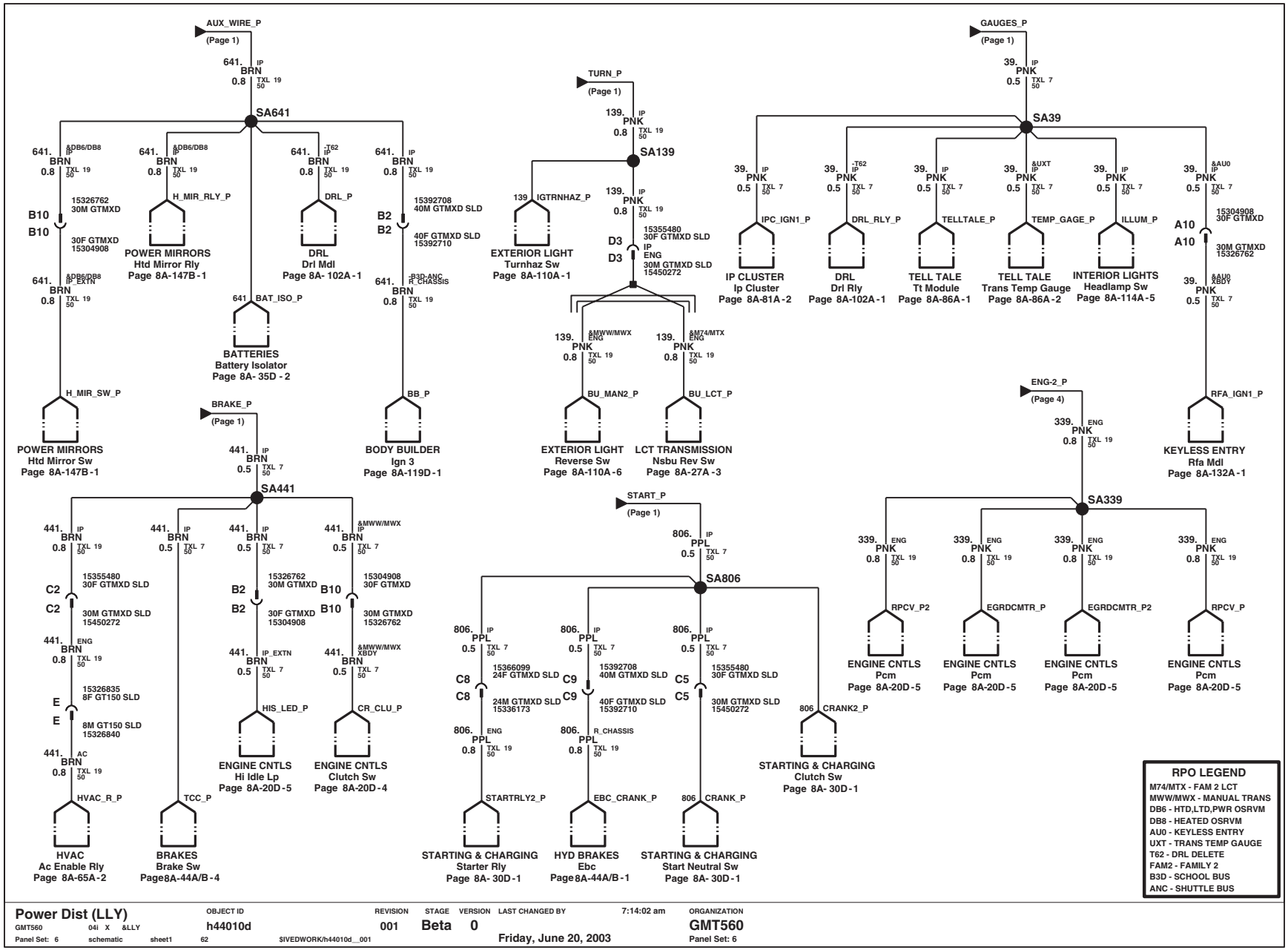
Power Distribution — (LLY) 6.6L-Diesel/Duramax



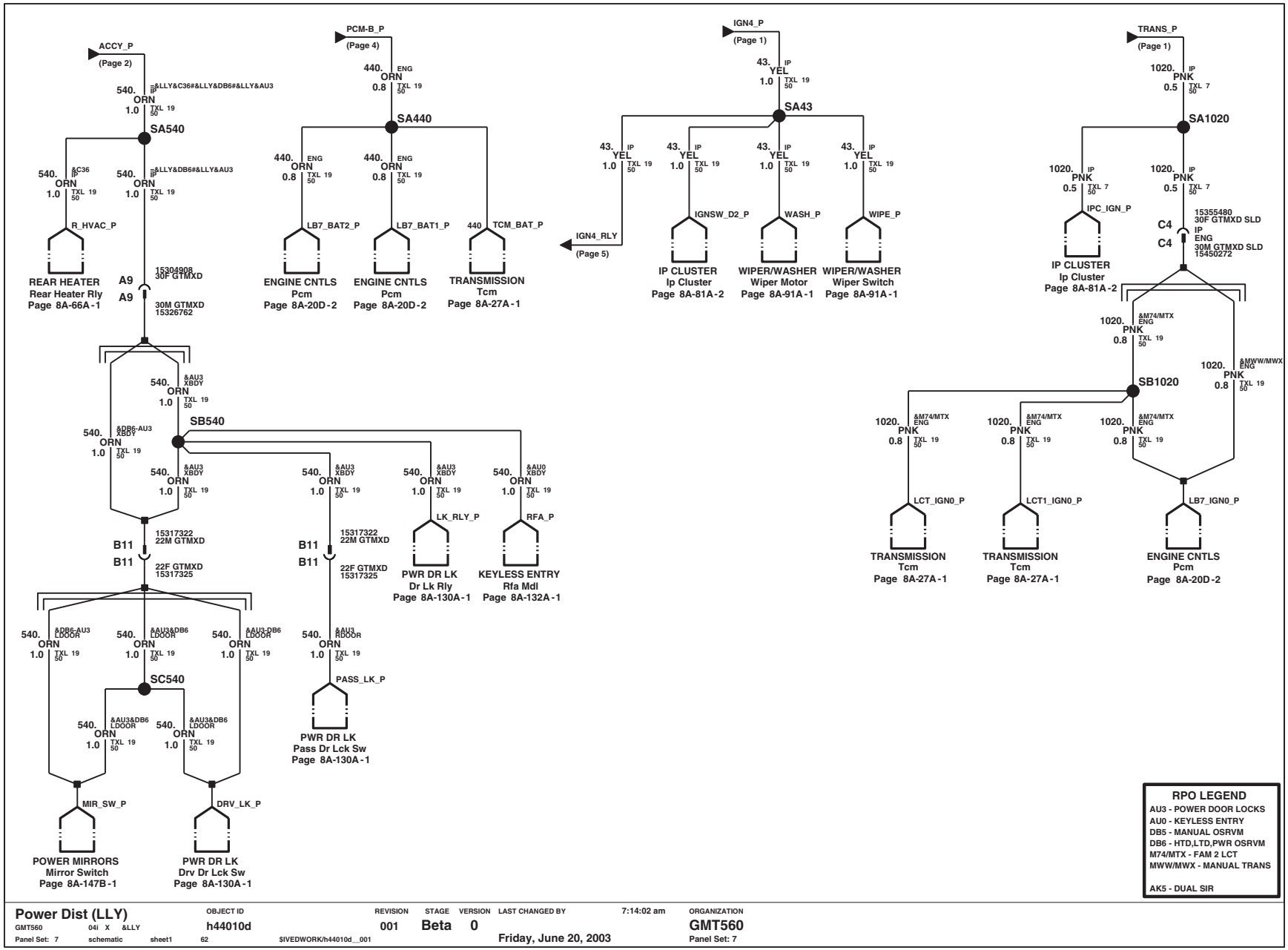
Power Distribution — (LLY) 6.6L-Diesel/Duramax



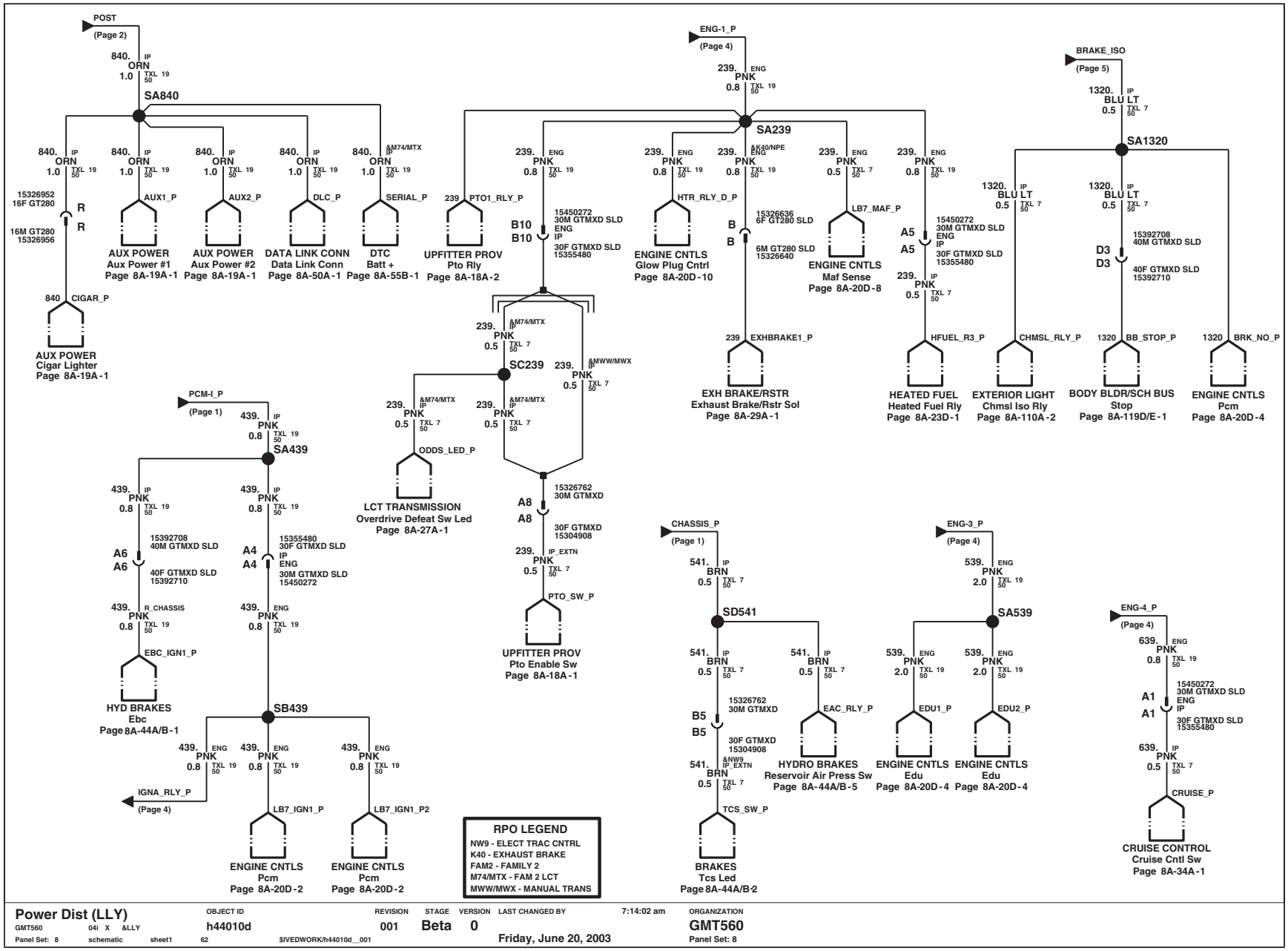
Power Distribution — (LLY) 6.6L-Diesel/Duramax


AUX_WIRE_P (Page 1)
641. IP BRN 0.8 TXL 19 50
SA641
641. &DB6/DB8 IP BRN 0.8 TXL 19 50
15326762 30M GTMXD
B10 B10
30F GTMXD 15304908
POWER MIRRORS Htd Mirror Rly Page 8A-147B-1
641. &DB6/DB8 IP BRN 0.8 TXL 19 50
H_MIR_RLY_P
641. -T62 IP BRN 0.8 TXL 19 50
DRL_P
DRL Drl Mdl Page 8A-102A-1
641. IP BRN 0.8 TXL 19 50
15392708 40M GTMXD SLD
B2 B2
40F GTMXD SLD 15392710
641. -B3D-ANC R_CHASSIS BRN 0.8 TXL 19 50
641. &DB6/DB8 IP_EXTN BRN 0.8 TXL 19 50
H_MIR_SW_P
POWER MIRRORS Htd Mirror Sw Page 8A-147B-1
641 BAT_ISO_P
BATTERIES Battery Isolator Page 8A-35D-2
BB_P
BODY BUILDER Ign 3 Page 8A-119D-1
BRAKE_P (Page 1)
441. IP BRN 0.5 TXL 7 50
SA441
441. IP BRN 0.8 TXL 19 50
15355480 30F GTMXD SLD
C2 C2
30M GTMXD SLD 15450272
441. ENG BRN 0.8 TXL 19 50
15326835 8F GT150 SLD
E E
8M GT150 SLD 15326840
441. AC BRN 0.8 TXL 19 50
HVAC_R_P
HVAC Ac Enable Rly Page 8A-65A-2
441. IP BRN 0.5 TXL 7 50
TCC_P
BRAKES Brake Sw Page 8A-44A/B-4
441. IP BRN 0.5 TXL 7 50
15326762 30M GTMXD
B2 B2
30F GTMXD 15304908
441. IP_EXTN BRN 0.5 TXL 7 50
HIS_LED_P
ENGINE CNTLS Hi Idle Lp Page 8A-20D-5
441. &MWW/MWX IP BRN 0.5 TXL 7 50
15304908 30F GTMXD
B10 B10
30M GTMXD 15326762
441. &MWW/MWX XBDY BRN 0.5 TXL 7 50
CR_CLU_P
ENGINE CNTLS Clutch Sw Page 8A-20D-4
TURN_P (Page 1)
139. IP PNK 0.8 TXL 19 50
SA139
139 IGTRNHAZ_P
EXTERIOR LIGHT Turnhaz Sw Page 8A-110A-1
139. IP PNK 0.8 TXL 19 50
15355480 30F GTMXD SLD
D3 D3
IP ENG 30M GTMXD SLD 15450272
139. &MWW/MWX ENG PNK 0.8 TXL 19 50
BU_MAN2_P
EXTERIOR LIGHT Reverse Sw Page 8A-110A-6
139. &M74/MTX ENG PNK 0.8 TXL 19 50
BU_LCT_P
LCT TRANSMISSION Nsbu Rev Sw Page 8A-27A-3
START_P (Page 1)
806. IP PPL 0.5 TXL 7 50
SA806
806. IP PPL 0.5 TXL 7 50
15366099 24F GTMXD SLD
C8 C8
24M GTMXD SLD 15336173
806. ENG PPL 0.8 TXL 19 50
STARTRLY2_P
STARTING & CHARGING Starter Rly Page 8A-30D-1
806. IP PPL 0.5 TXL 7 50
15392708 40M GTMXD SLD
C9 C9
40F GTMXD SLD 15392710
806. R_CHASSIS PPL 0.8 TXL 19 50
EBC_CRANK_P
HYD BRAKES Ebc Page 8A-44A/B-1
806. IP PPL 0.5 TXL 7 50
15355480 30F GTMXD SLD
C5 C5
30M GTMXD SLD 15450272
806 CRANK_P
STARTING & CHARGING Start Neutral Sw Page 8A-30D-1
806 CRANK2_P
STARTING & CHARGING Clutch Sw Page 8A-30D-1
GAUGES_P (Page 1)
39. IP PNK 0.5 TXL 7 50
SA39
39. IP PNK 0.5 TXL 7 50
IPC_IGN1_P
IP CLUSTER Ip Cluster Page 8A-81A-2
39. -T62 IP PNK 0.5 TXL 7 50
DRL_RLY_P
DRL Drl Rly Page 8A-102A-1
39. IP PNK 0.5 TXL 7 50
TELLTALE_P
TELL TALE Tt Module Page 8A-86A-1
39. &UXT IP PNK 0.5 TXL 7 50
TEMP_GAGE_P
TELL TALE Trans Temp Gauge Page 8A-86A-2
39. IP PNK 0.5 TXL 7 50
ILLUM_P
INTERIOR LIGHTS Headlamp Sw Page 8A-114A-5
39. &AU0 IP PNK 0.5 TXL 7 50
15304908 30F GTMXD
A10 A10
30M GTMXD 15326762
39. &AU0 XBDY PNK 0.5 TXL 7 50
RFA_IGN1_P
KEYLESS ENTRY Rfa Mdl Page 8A-132A-1
ENG-2_P (Page 4)
339. ENG PNK 0.8 TXL 19 50
SA339
339. ENG PNK 0.8 TXL 19 50
RPCV_P2
ENGINE CNTLS Pcm Page 8A-20D-5
339. ENG PNK 0.8 TXL 19 50
EGRDCMTR_P
ENGINE CNTLS Pcm Page 8A-20D-5
339. ENG PNK 0.8 TXL 19 50
EGRDCMTR_P2
ENGINE CNTLS Pcm Page 8A-20D-5
339. ENG PNK 0.8 TXL 19 50
RPCV_P
ENGINE CNTLS Pcm Page 8A-20D-5
RPO LEGEND
M74/MTX - FAM 2 LCT
MWW/MWX - MANUAL TRANS
DB6 - HTD,LTD,PWR OSRVM
DB8 - HEATED OSRVM
AU0 - KEYLESS ENTRY
UXT - TRANS TEMP GAUGE
T62 - DRL DELETE
FAM2 - FAMILY 2
B3D - SCHOOL BUS
ANC - SHUTTLE BUS
Power Dist (LLY)
GMT560 04i X &LLY
Panel Set: 6 schematic sheet1 62
OBJECT ID h44010d
$IVEDWORK/h44010d__001
REVISION 001
STAGE Beta
VERSION 0
LAST CHANGED BY
7:14:02 am
Friday, June 20, 2003
ORGANIZATION GMT560
Panel Set: 6

Power Distribution — (LLY) 6.6L-Diesel/Duramax

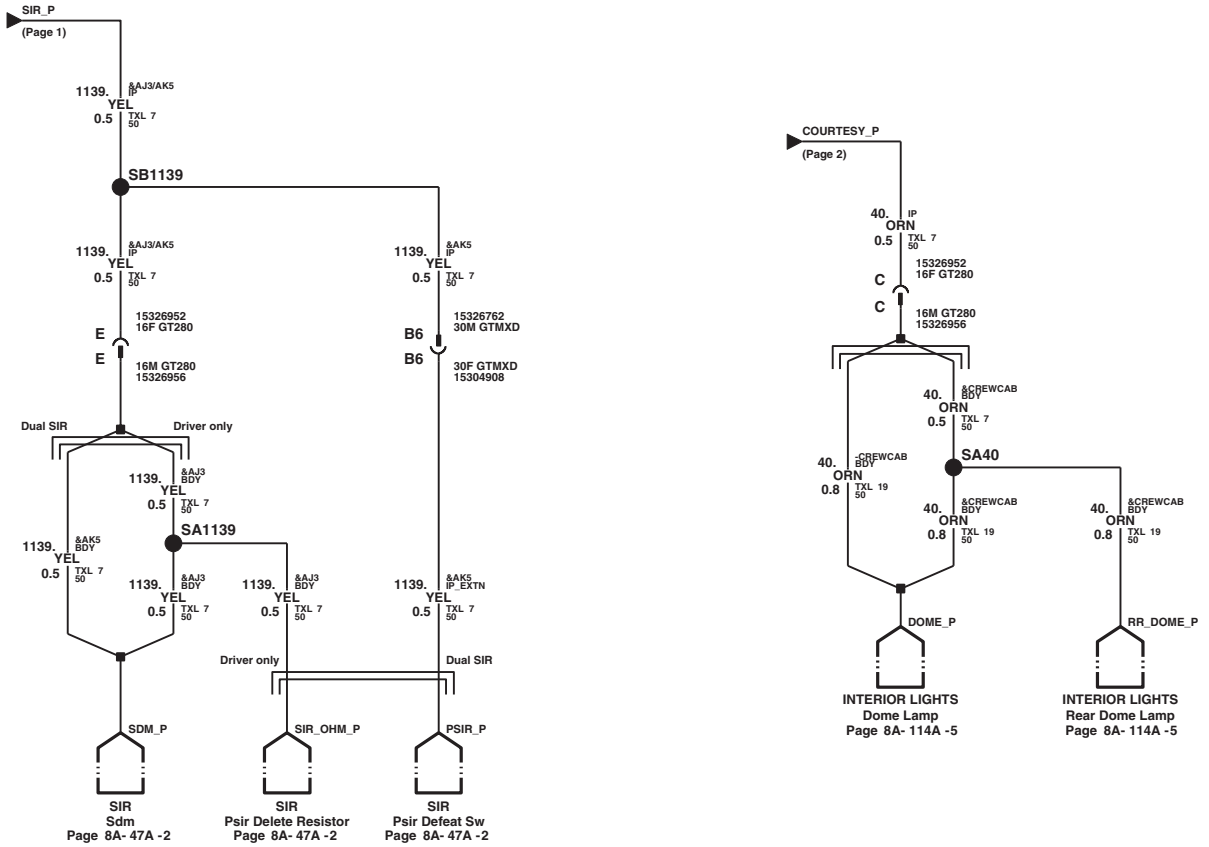


Power Distribution — (LLY) 6.6L-Diesel/Duramax



Power Distribution — (LLY) 6.6L-Diesel/Duramax

04 560 000	TY	BETA - INITIAL CREATION	18SE01	001
04 560 1149	JG	TRANS RPO UPDATE	13DE01	001
04 560 1106	JG	Update 900 ckts	08FE02	001
04i 560 1198	JG	Changed LB7 to LLY	26MR02	001
03 560 1228	JG	Added RPO ANC	07MY02	001


SIR_P
(Page 1)
1139. &AJ3/AK5 IP YEL 0.5 TXL 7 50
SB1139
1139. &AJ3/AK5 IP YEL 0.5 TXL 7 50
E 15326952 16F GT280
E 16M GT280 15326956
1139. &AK5 IP YEL 0.5 TXL 7 50
B6 15326762 30M GTMXD
B6 30F GTMXD 15304908
Dual SIR
Driver only
1139. &AJ3 BDY YEL 0.5 TXL 7 50
SA1139
1139. &AK5 BDY YEL 0.5 TXL 7 50
1139. &AJ3 BDY YEL 0.5 TXL 7 50
1139. &AJ3 BDY YEL 0.5 TXL 7 50
1139. &AK5 IP_EXTN YEL 0.5 TXL 7 50
Driver only
Dual SIR
SDM_P
SIR_OHM_P
PSIR_P
SIR Sdm Page 8A- 47A -2
SIR Psir Delete Resistor Page 8A- 47A -2
SIR Psir Defeat Sw Page 8A- 47A -2
COURTESY_P
(Page 2)
40. IP ORN 0.5 TXL 7 50
C 15326952 16F GT280
C 16M GT280 15326956
40. &CREWCAB BDY ORN 0.5 TXL 7 50
40. &CREWCAB BDY ORN 0.8 TXL 19 50
SA40
40. &CREWCAB BDY ORN 0.8 TXL 19 50
40. &CREWCAB BDY ORN 0.8 TXL 19 50
DOME_P
RR_DOME_P
INTERIOR LIGHTS Dome Lamp Page 8A- 114A -5
INTERIOR LIGHTS Rear Dome Lamp Page 8A- 114A -5

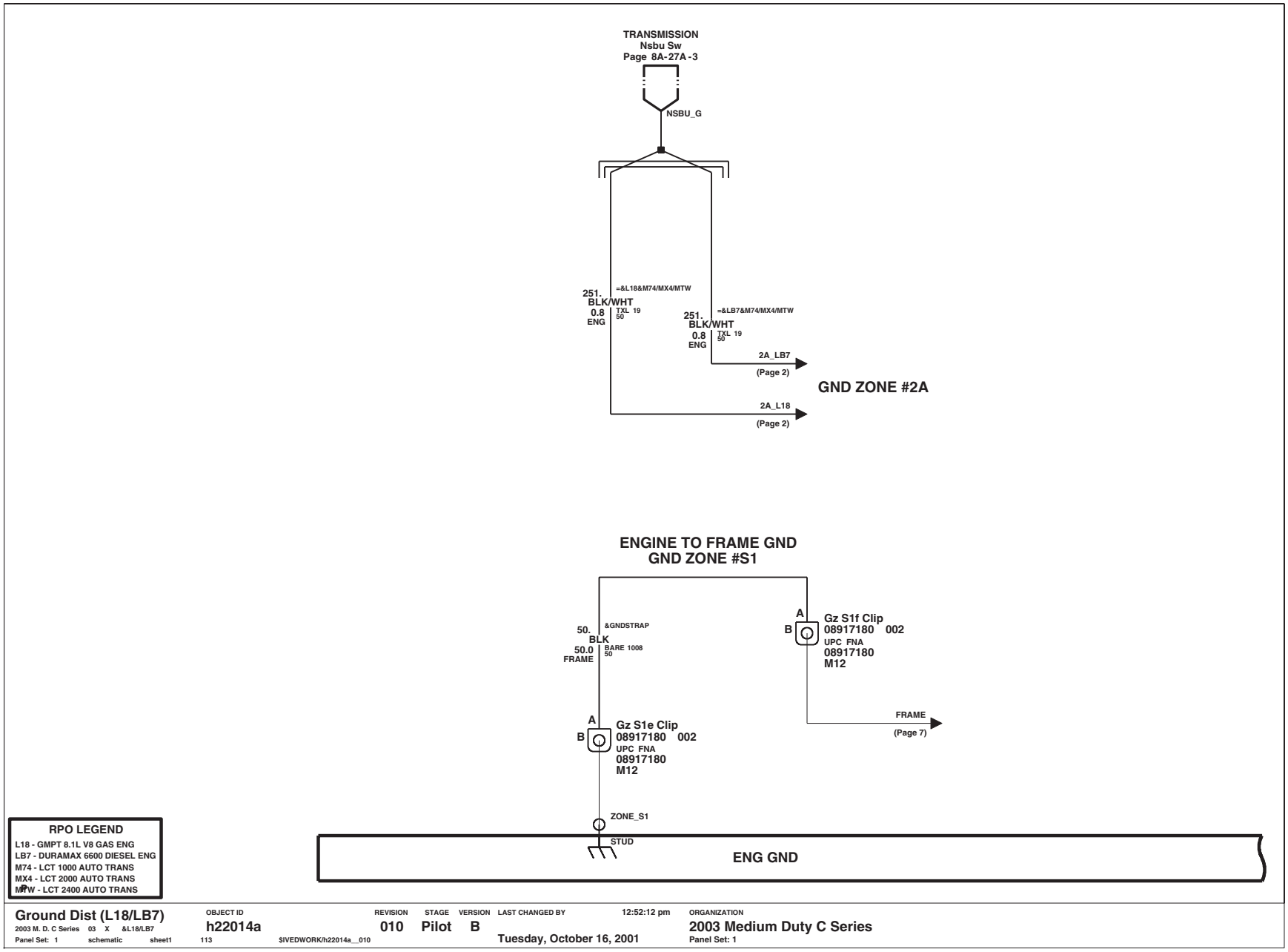
RPO LEGEND
AJ3 - DRIVER SIR
AK5 - DUAL SIR
CREWCAB - CREW CAB

Power Dist (LLY)

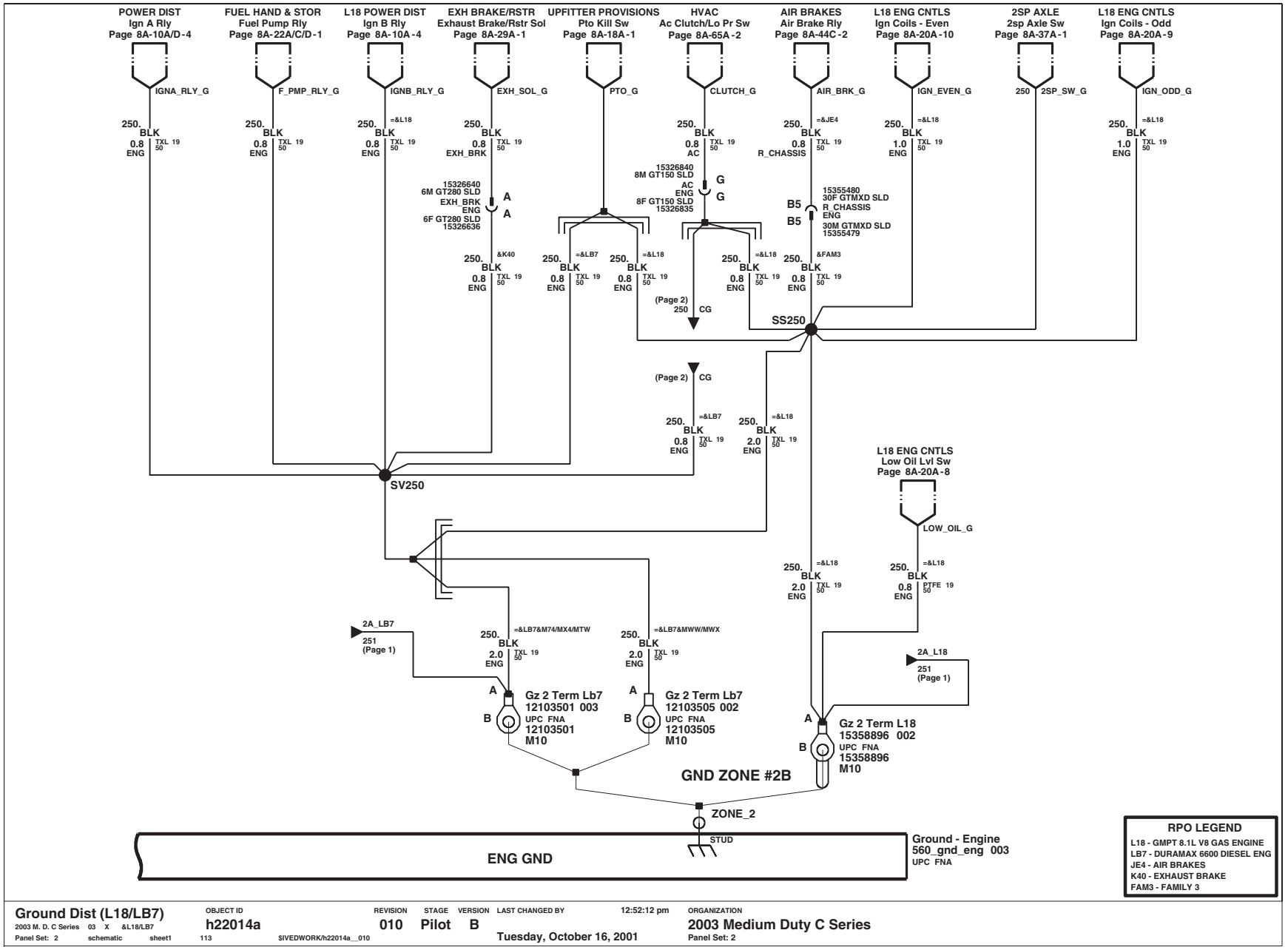
OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
h44010d	001	Beta	0		7:14:02 am	GMT560

GMT560 04i X &LLY Panel Set: 9 schematic sheet1 62 $IVEDWORK/h44010d__001 Friday, June 20, 2003 Panel Set: 9

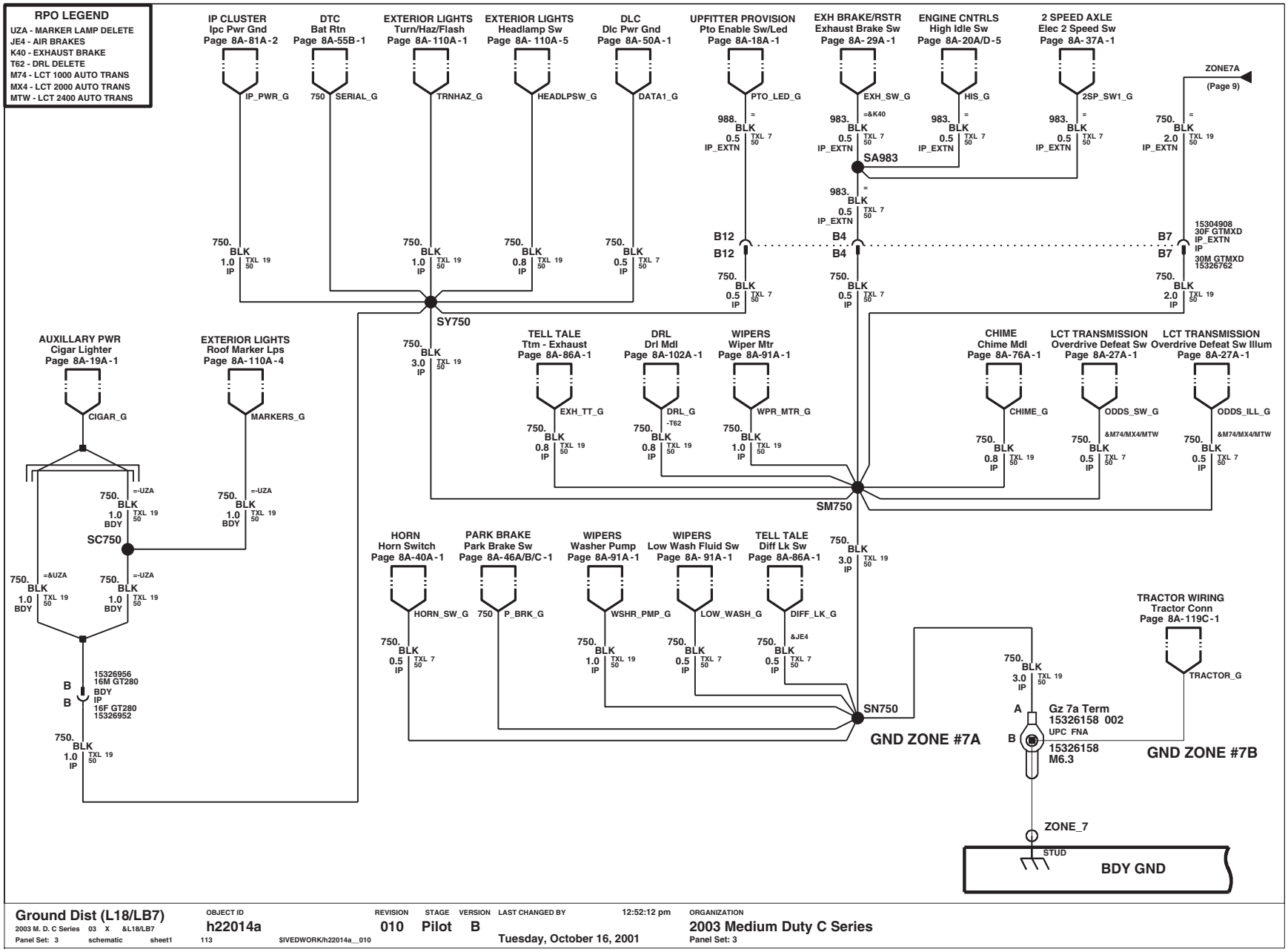
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax



Ground Distribution — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax



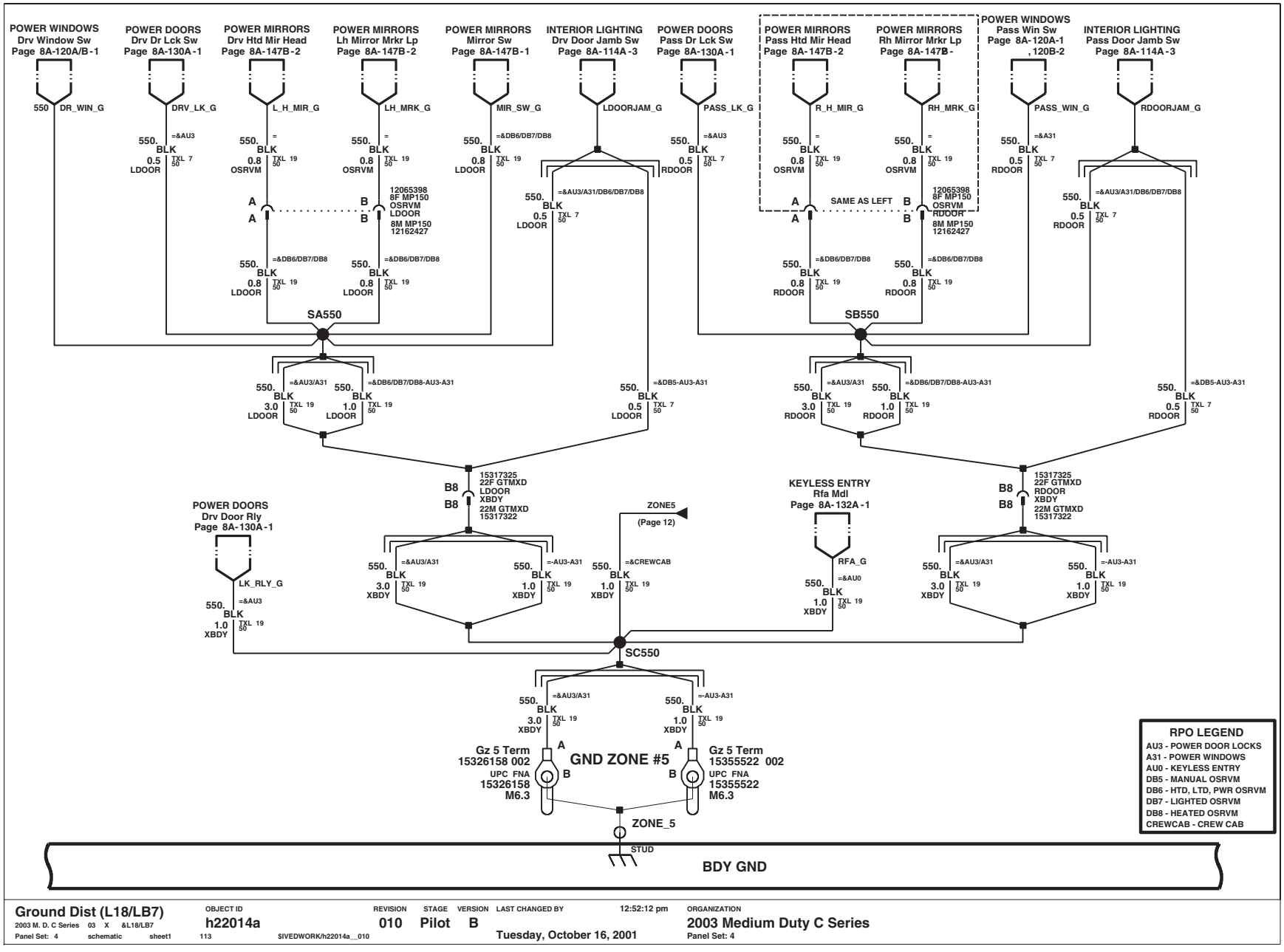
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax


RPO LEGEND
UZA - MARKER LAMP DELETE
JE4 - AIR BRAKES
K40 - EXHAUST BRAKE
T62 - DRL DELETE
M74 - LCT 1000 AUTO TRANS
MX4 - LCT 2000 AUTO TRANS
MTW - LCT 2400 AUTO TRANS
IP CLUSTER Ipc Pwr Gnd Page 8A-81A-2
DTC Bat Rtn Page 8A-55B-1
EXTERIOR LIGHTS Turn/Haz/Flash Page 8A-110A-1
EXTERIOR LIGHTS Headlamp Sw Page 8A-110A-5
DLC Dlc Pwr Gnd Page 8A-50A-1
UPFITTER PROVISION Pto Enable Sw/Led Page 8A-18A-1
EXH BRAKE/RSTR Exhaust Brake Sw Page 8A-29A-1
ENGINE CNTRLS High Idle Sw Page 8A-20A/D-5
2 SPEED AXLE Elec 2 Speed Sw Page 8A-37A-1
ZONE7A (Page 9)
AUXILLARY PWR Cigar Lighter Page 8A-19A-1
EXTERIOR LIGHTS Roof Marker Lps Page 8A-110A-4
TELL TALE Ttm - Exhaust Page 8A-86A-1
DRL Drl Mdl Page 8A-102A-1
WIPERS Wiper Mtr Page 8A-91A-1
CHIME Chime Mdl Page 8A-76A-1
LCT TRANSMISSION Overdrive Defeat Sw Page 8A-27A-1
LCT TRANSMISSION Overdrive Defeat Sw Illum Page 8A-27A-1
HORN Horn Switch Page 8A-40A-1
PARK BRAKE Park Brake Sw Page 8A-46A/B/C-1
WIPERS Washer Pump Page 8A-91A-1
WIPERS Low Wash Fluid Sw Page 8A-91A-1
TELL TALE Diff Lk Sw Page 8A-86A-1
TRACTOR WIRING Tractor Conn Page 8A-119C-1
SY750
SM750
SC750
SN750
SA983
B12
B4
B7
15304908 30F GTMXD IP_EXTN IP 30M GTMXD 15326762
15326956 16M GT280 BDY IP 16F GT280 15326952
Gz 7a Term 15326158 002 UPC FNA
15326158 M6.3
GND ZONE #7A
GND ZONE #7B
ZONE_7
STUD
BDY GND

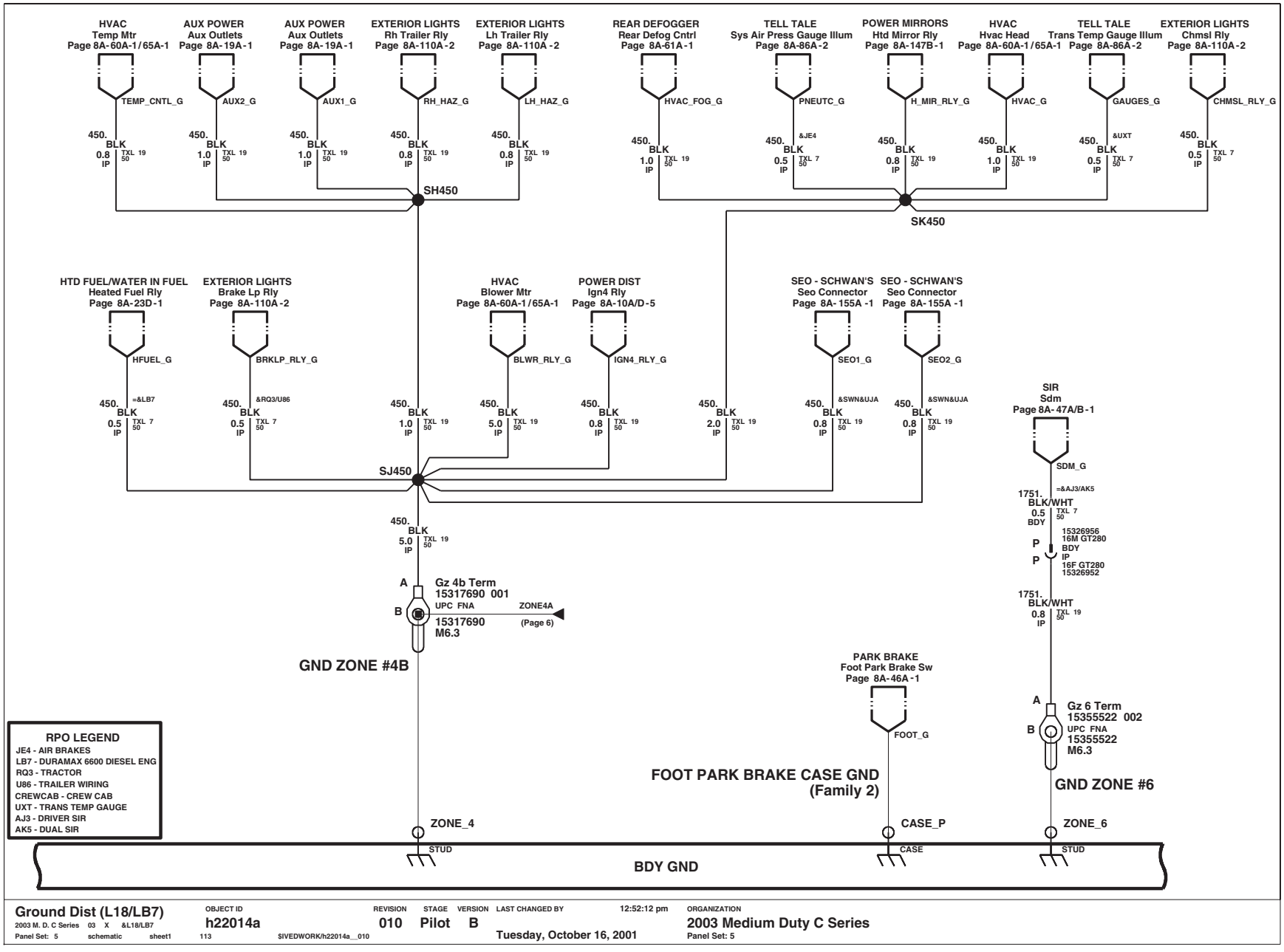
Ground Dist (L18/LB7) | OBJECT ID h22014a | REVISION 010 | STAGE Pilot | VERSION B | LAST CHANGED BY | 12:52:12 pm Tuesday, October 16, 2001 | ORGANIZATION 2003 Medium Duty C Series

2003 M. D. C Series 03 X &L18/LB7 | Panel Set: 3 | schematic | sheet1 | 113 | $IVEDWORK/h22014a__010 | Panel Set: 3

Ground Distribution — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax



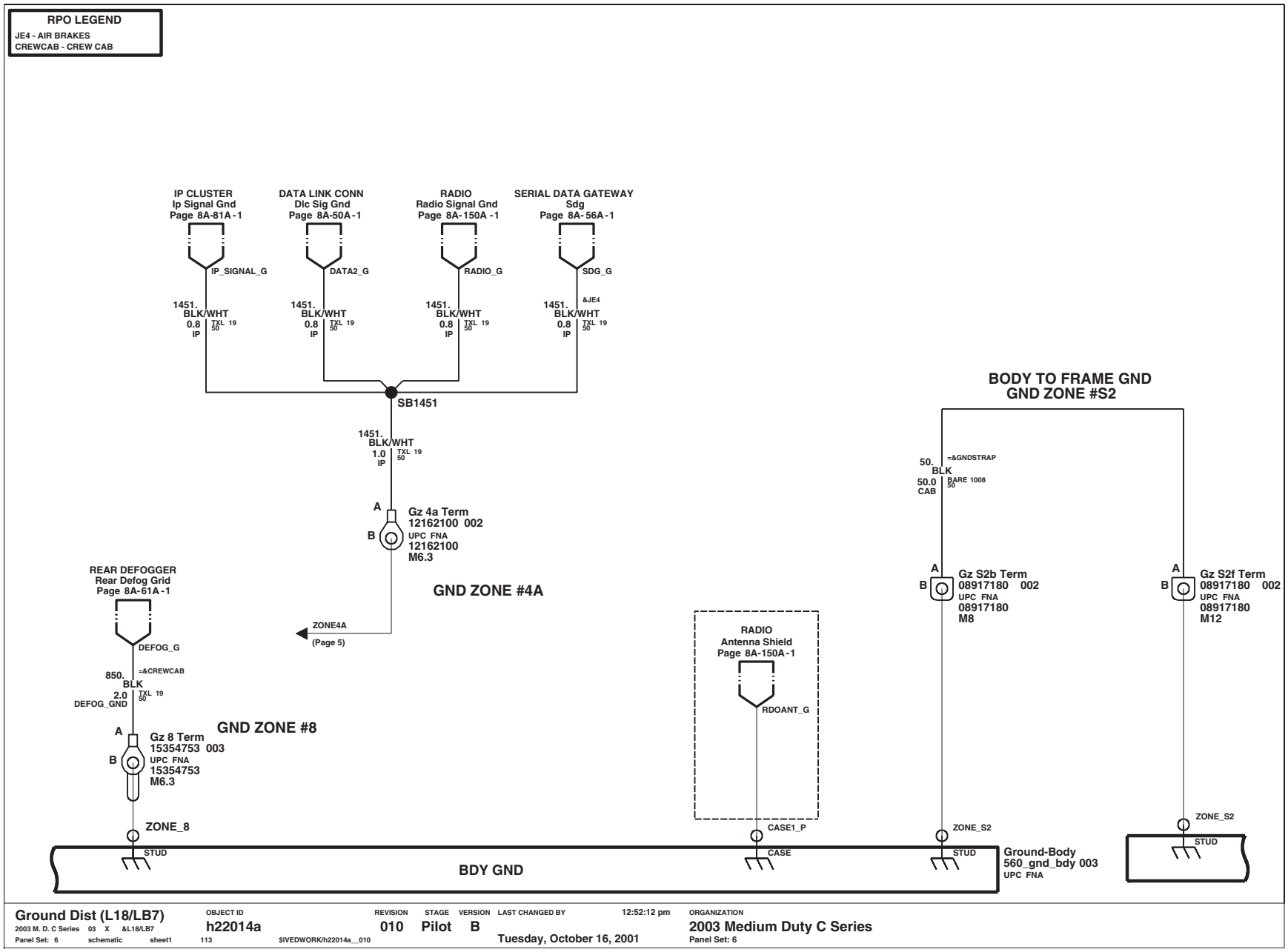
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax



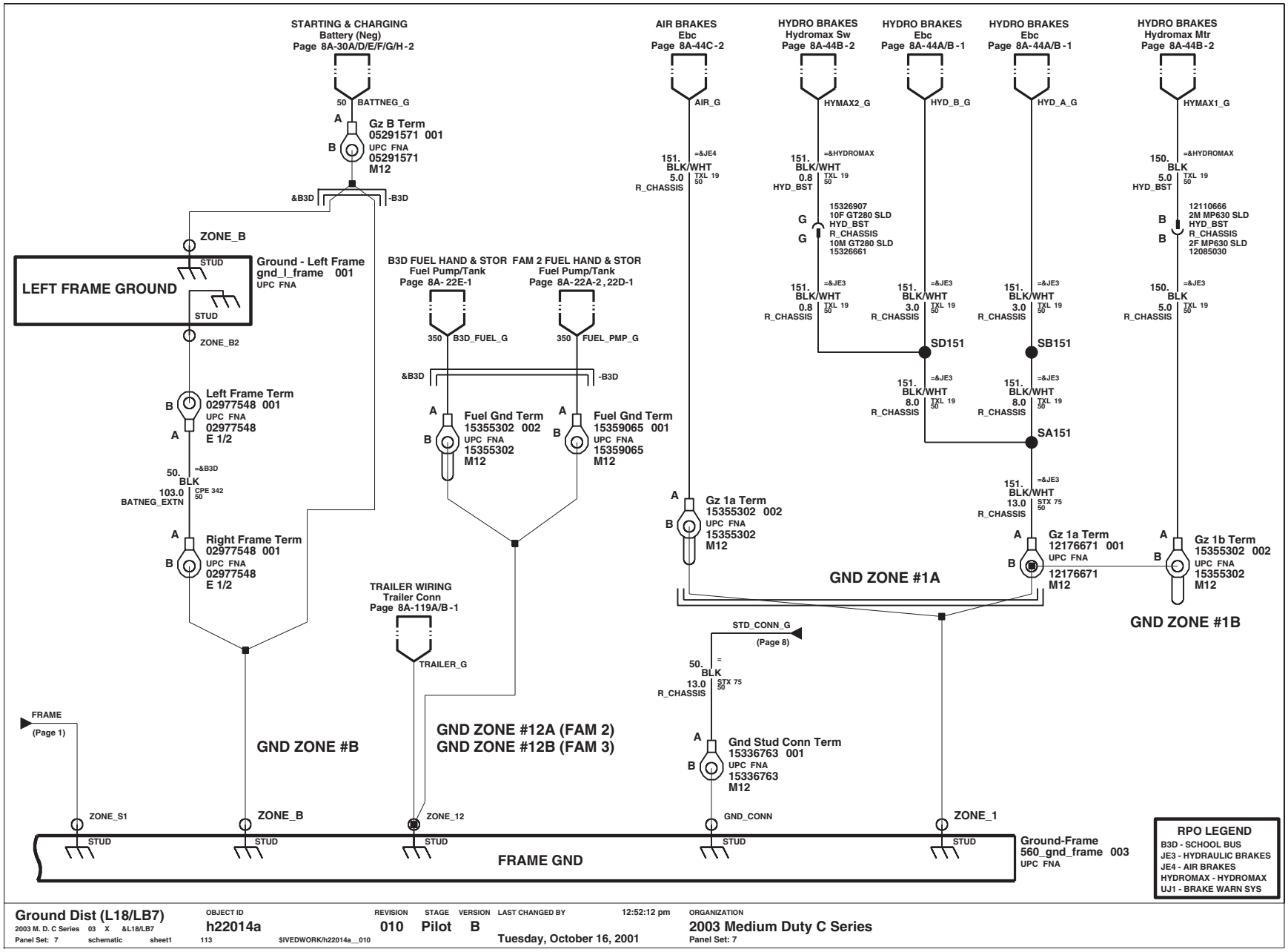
Ground Dist (L18/LB7)
2003 M. D. C Series 03 X &L18/LB7
Panel Set: 5 schematic sheet1 113 $IVEDWORK/h22014a__010

OBJECT ID h22014a
REVISION 010
STAGE Pilot
VERSION B
LAST CHANGED BY
12:52:12 pm
Tuesday, October 16, 2001
ORGANIZATION
2003 Medium Duty C Series
Panel Set: 5

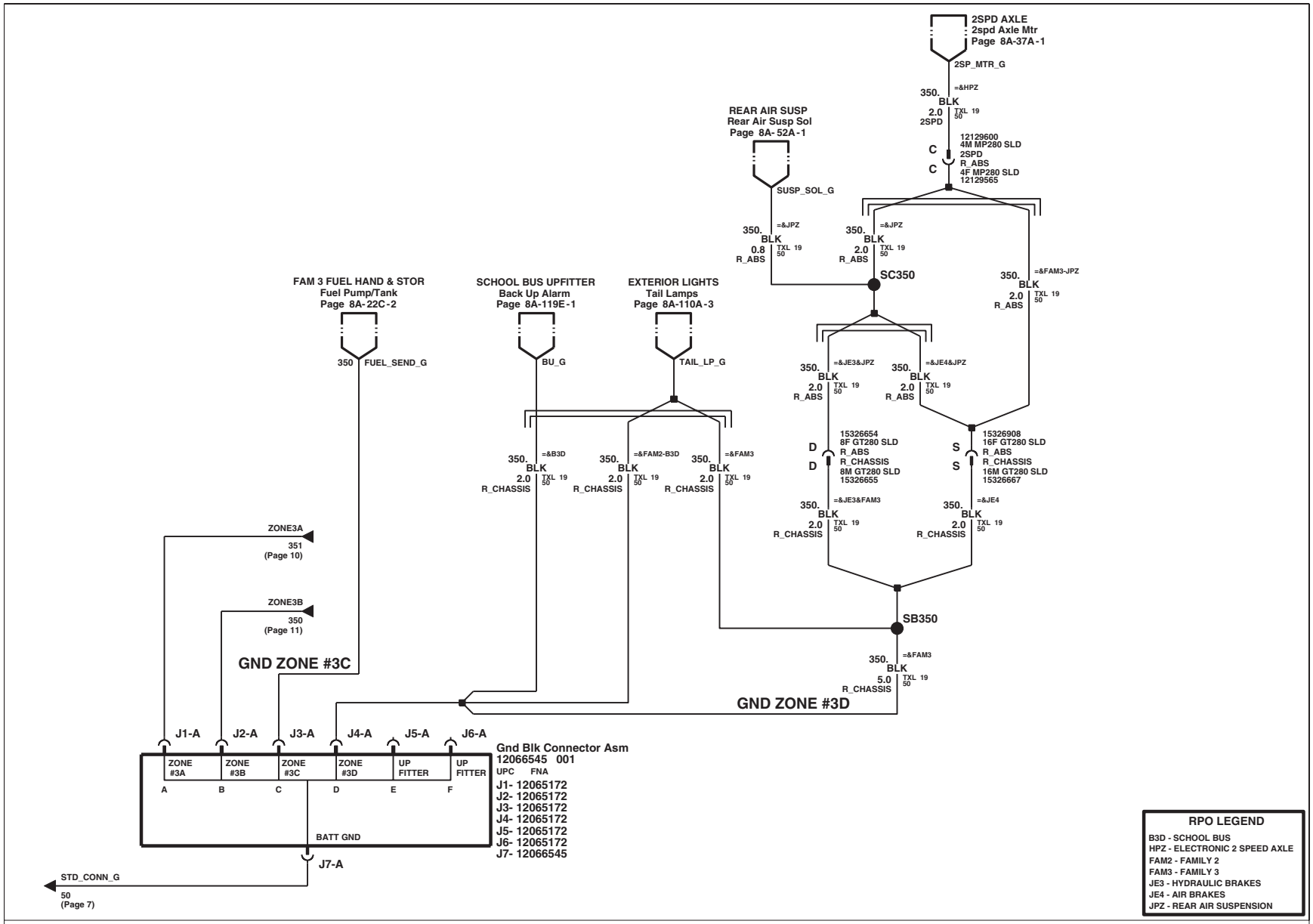
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax



Ground Distribution — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax



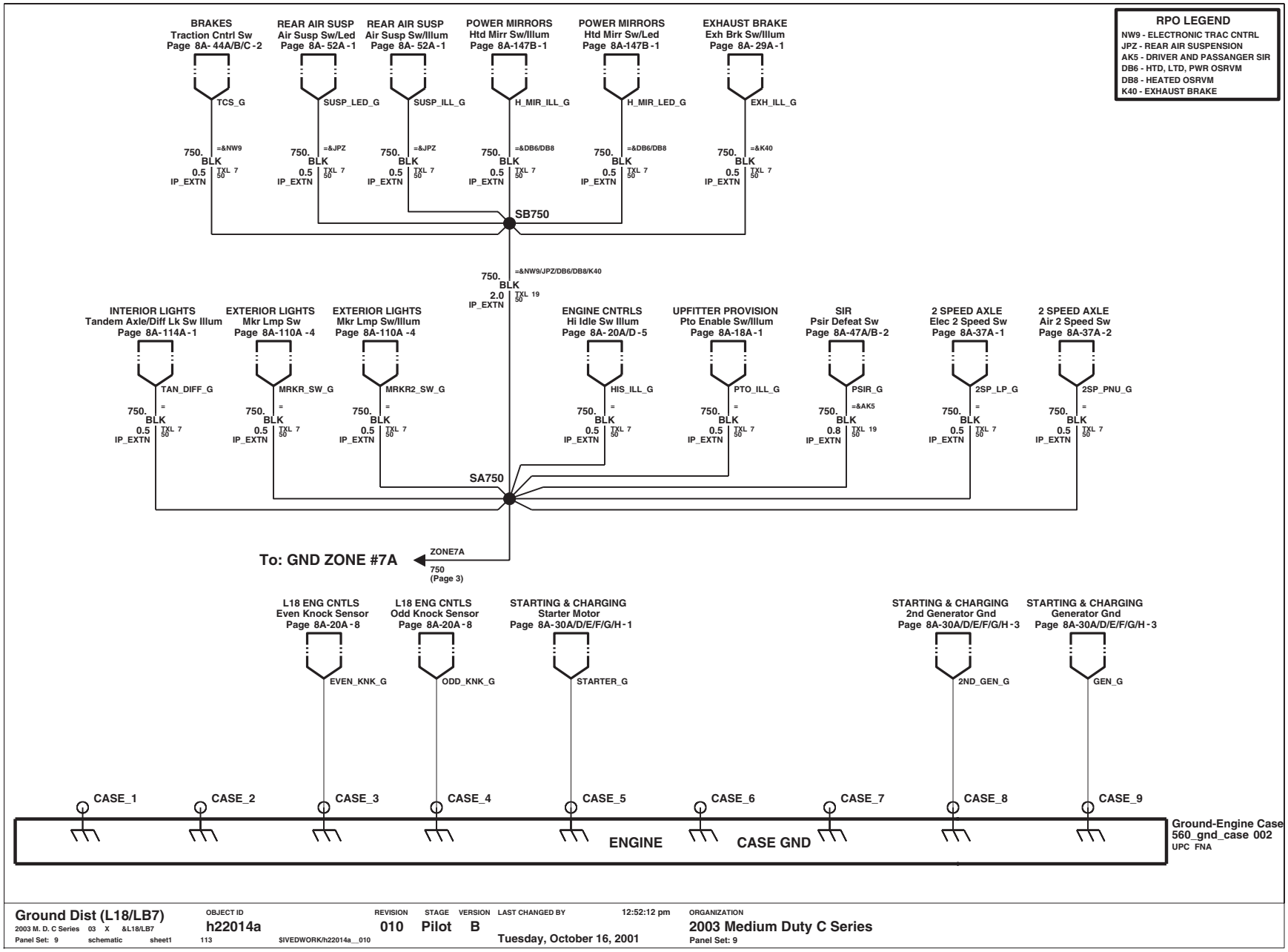
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax



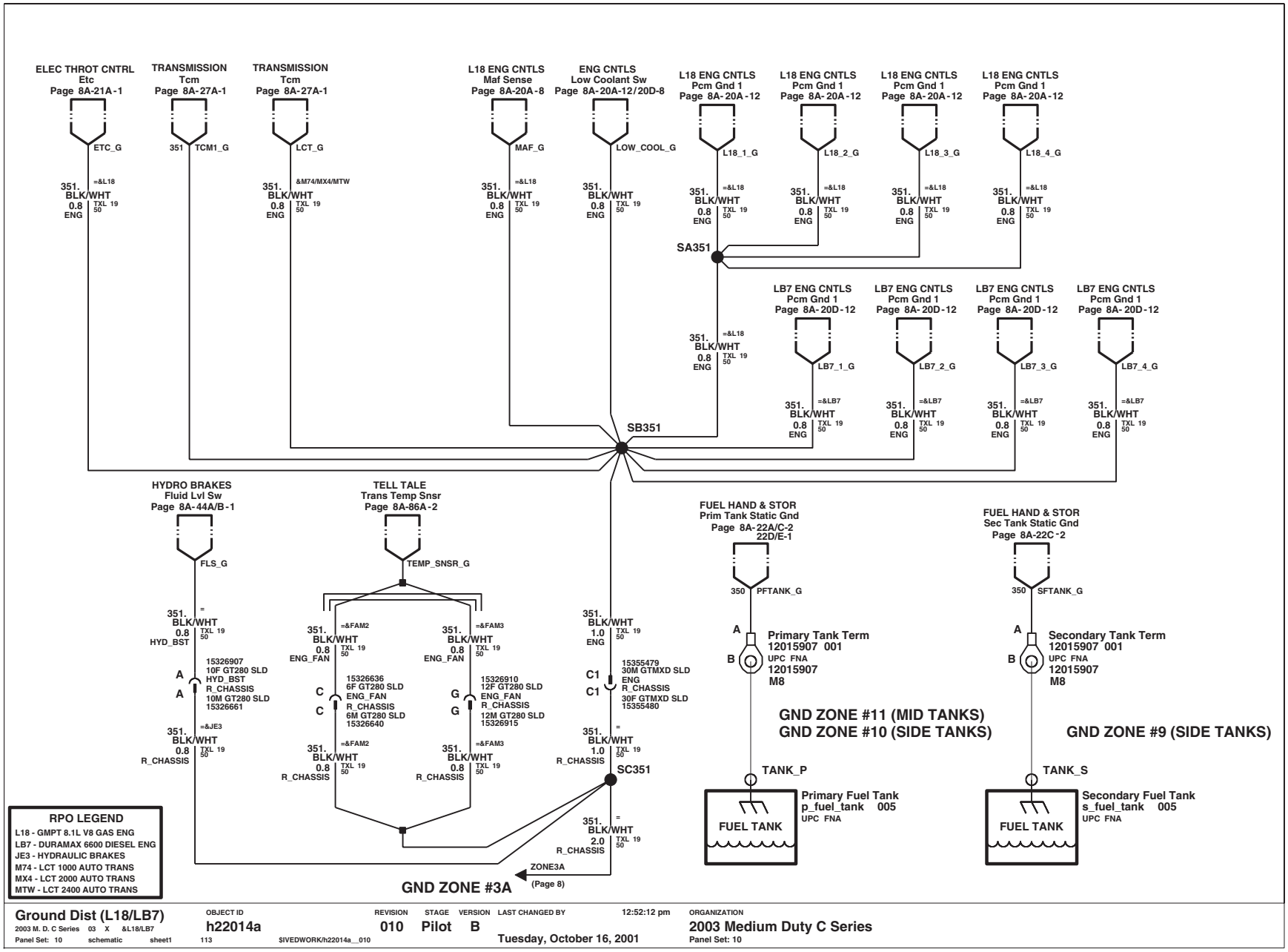
Ground Dist (L18/LB7)
2003 M. D. C Series 03 X &L18/LB7
Panel Set: 8 schematic sheet1 113 $IVEDWORK/h22014a__010

OBJECT ID: h22014a
REVISION: 010
STAGE: Pilot
VERSION: B
LAST CHANGED BY:
12:52:12 pm Tuesday, October 16, 2001
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 8

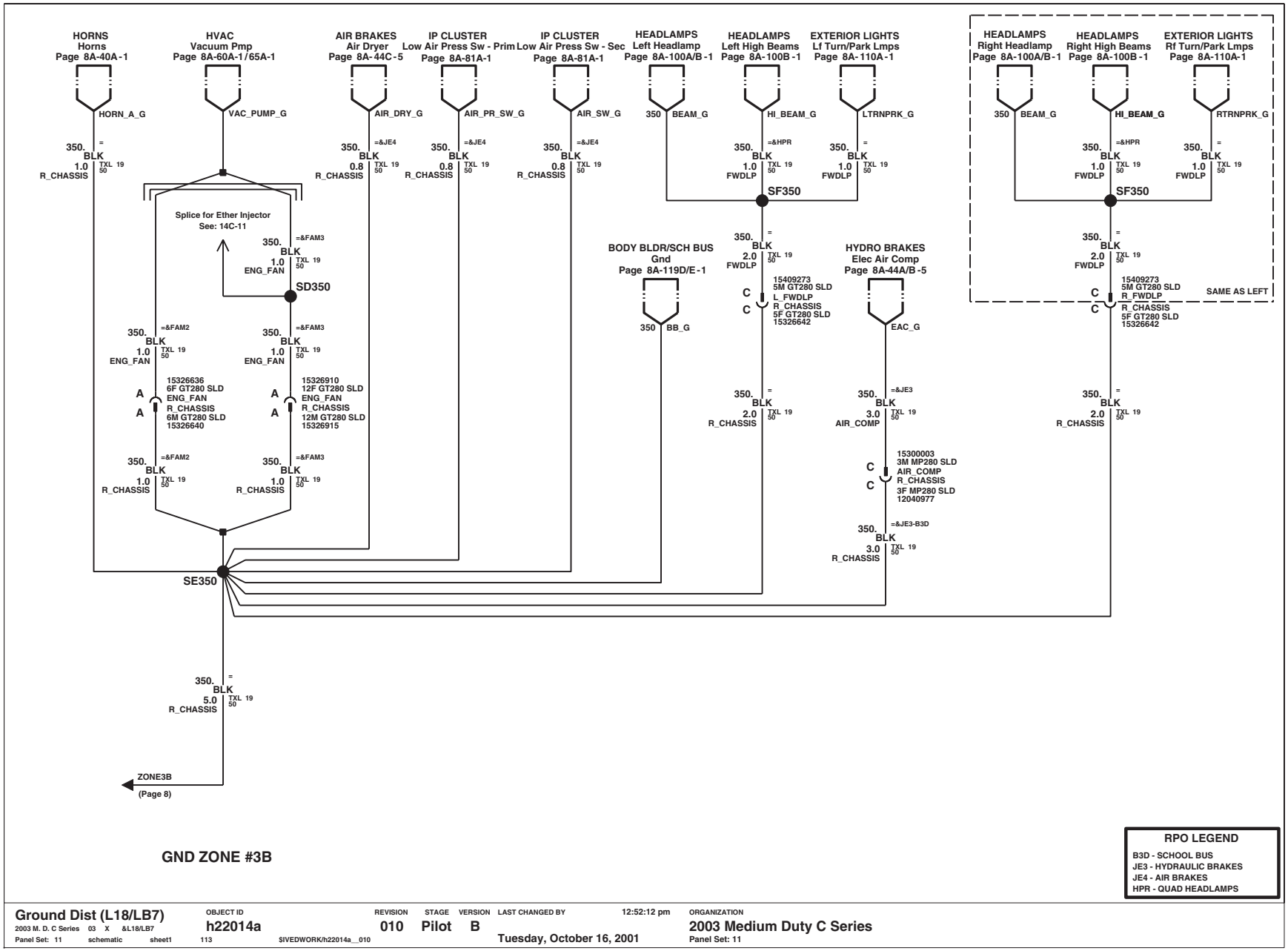
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax



Ground Distribution — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax

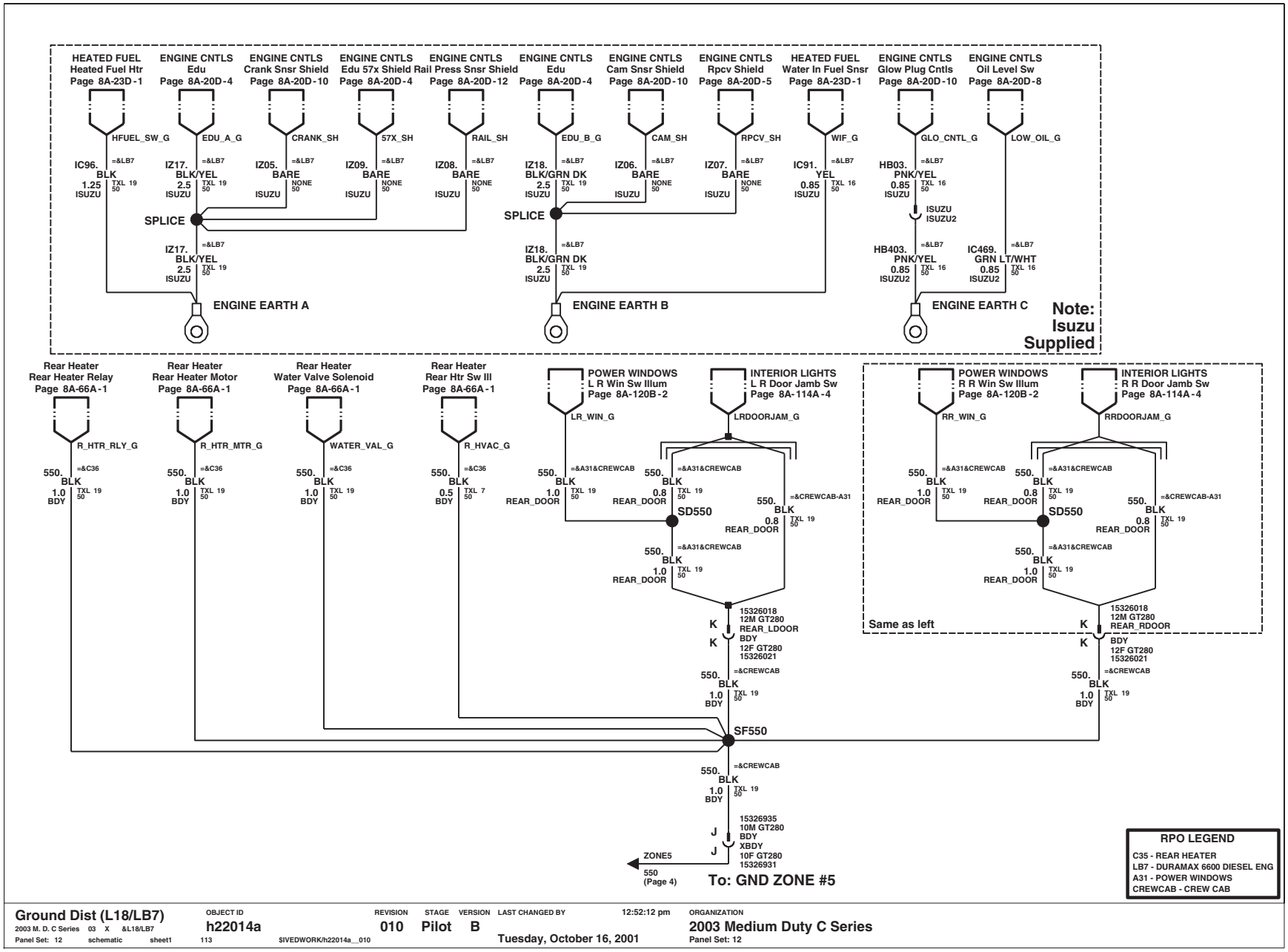


Ground Distribution — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax

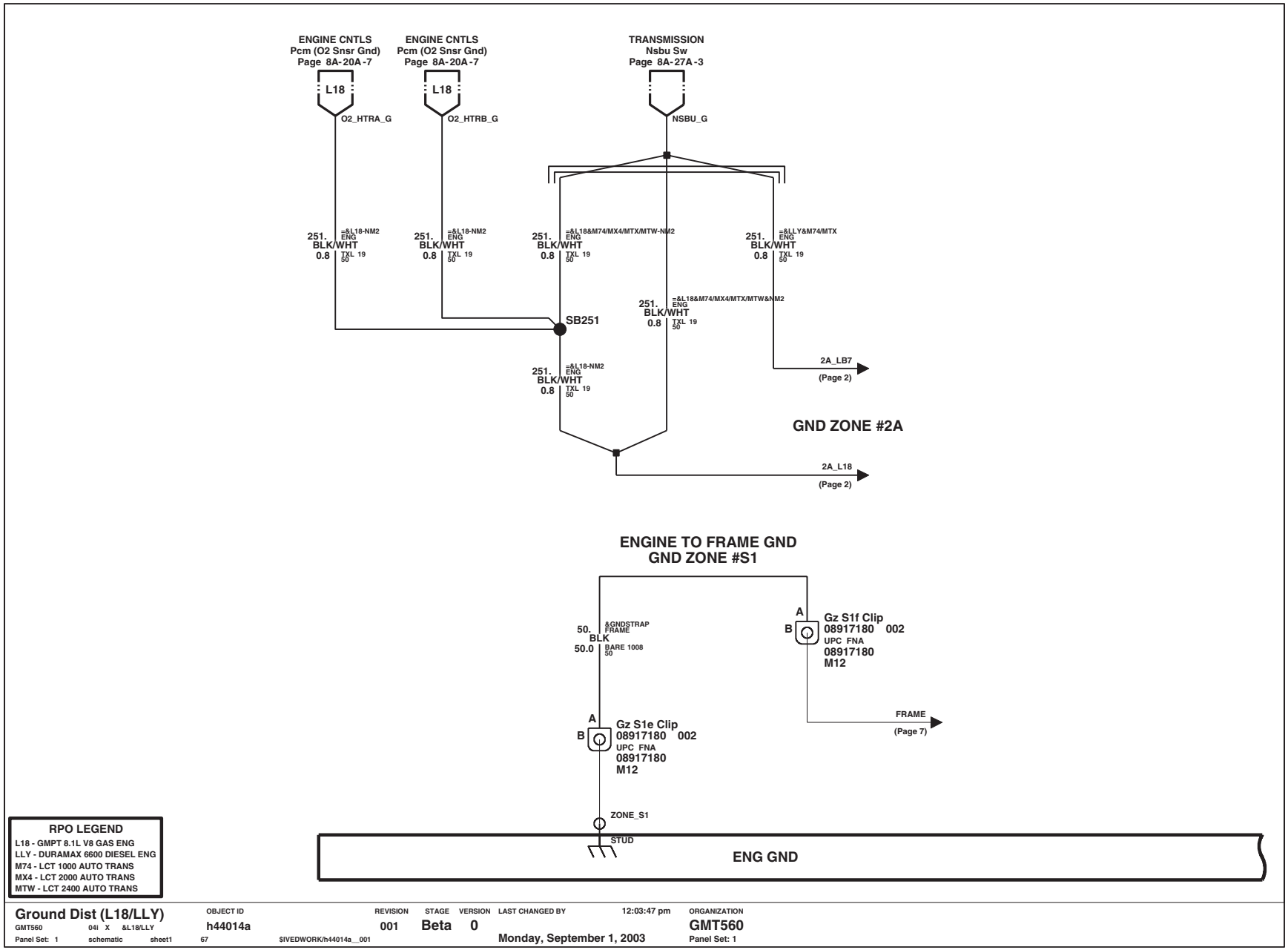


Ground Dist (L18/LB7)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X &L18/LB7	h22014a	010	Pilot	B		12:52:12 pm	2003 Medium Duty C Series
Panel Set: 11 schematic sheet1 113 $IVEDWORK/h22014a__010					Tuesday, October 16, 2001		Panel Set: 11

Ground Distribution — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax



Ground Distribution — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax

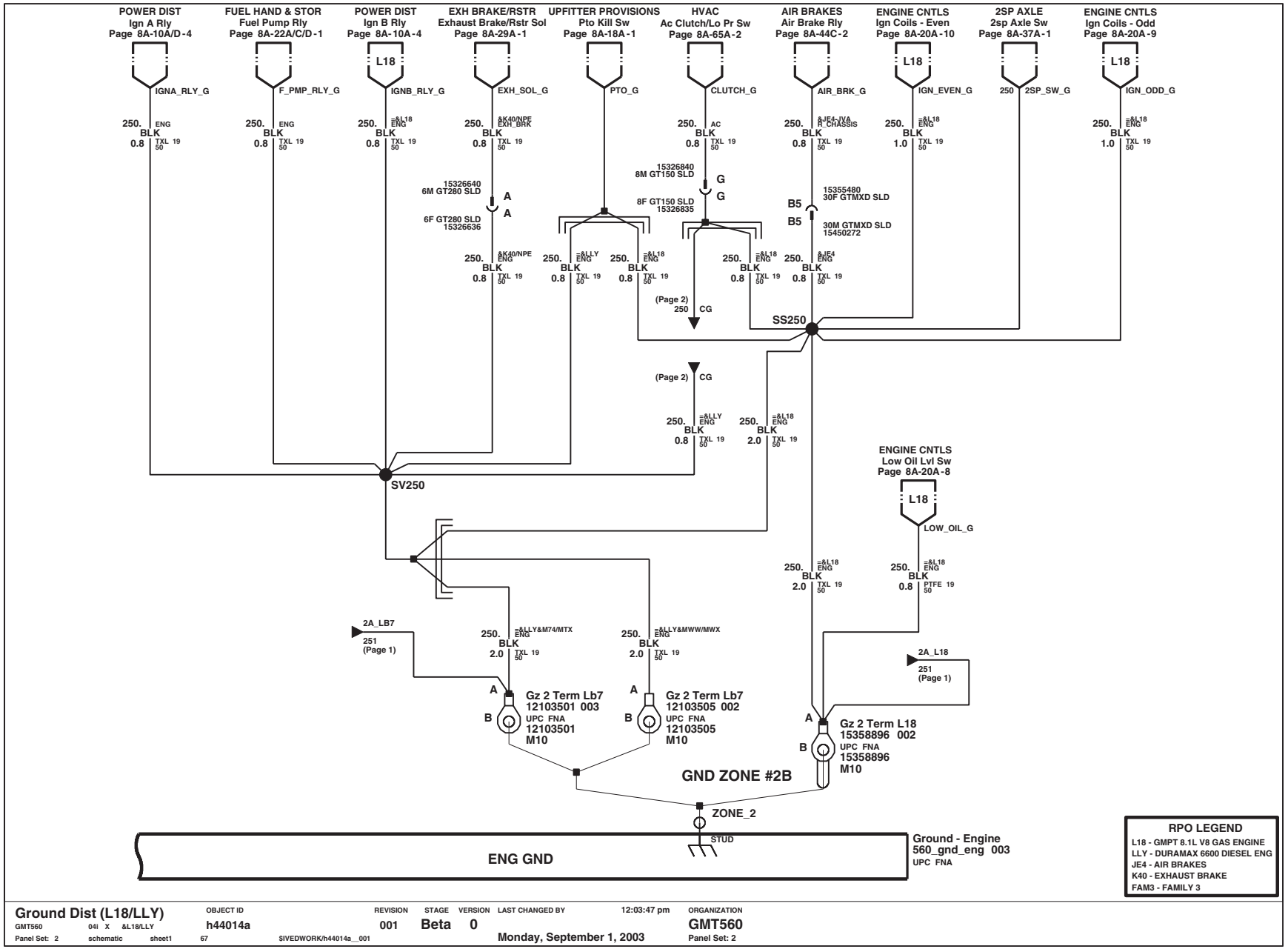


RPO LEGEND

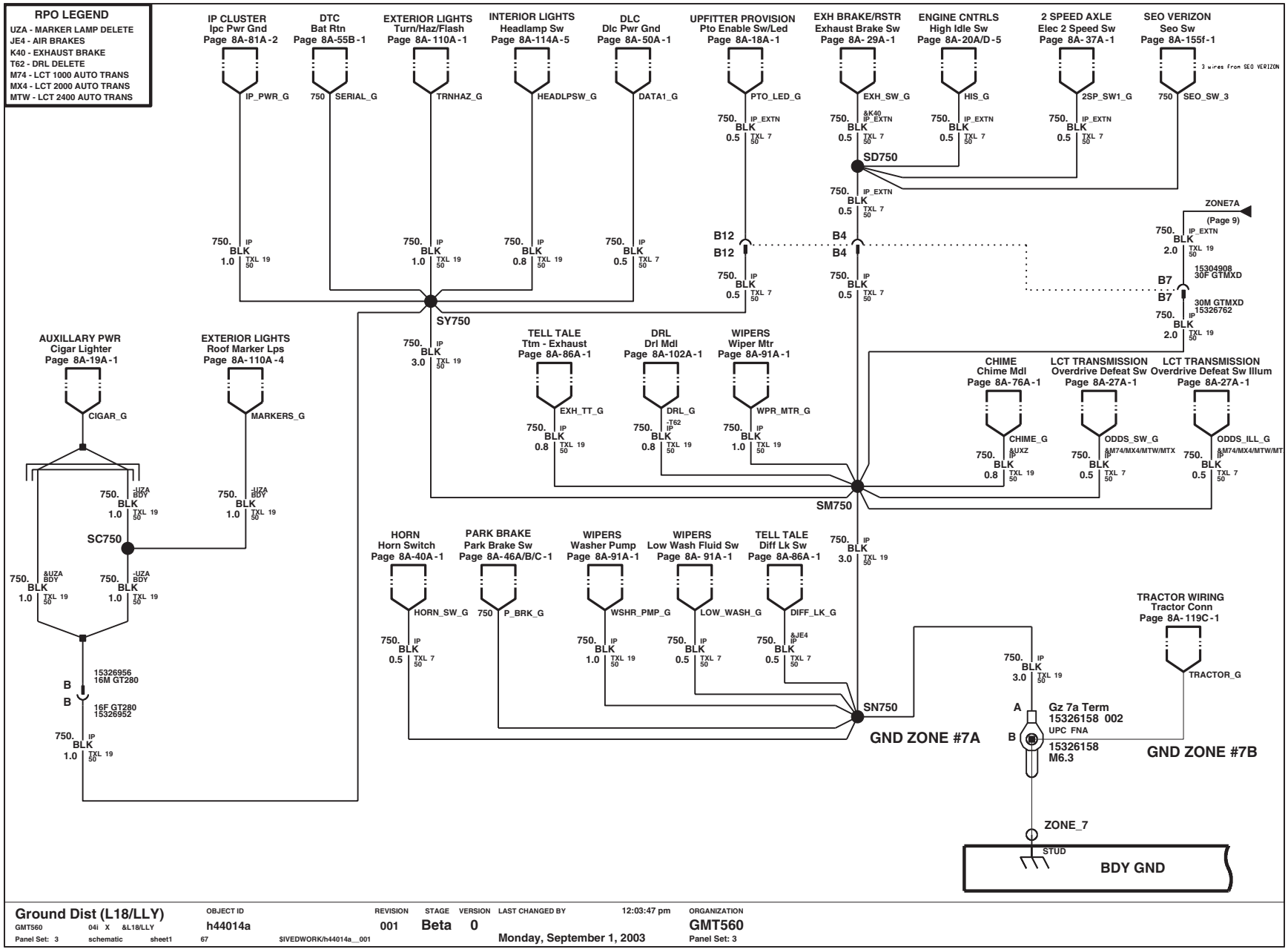
L18 - GMPT 8.1L V8 GAS ENG
LLY - DURAMAX 6600 DIESEL ENG
M74 - LCT 1000 AUTO TRANS
MX4 - LCT 2000 AUTO TRANS
MTW - LCT 2400 AUTO TRANS

Ground Dist (L18/LLY)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY	12:03:47 pm	ORGANIZATION
GMT560 04i X &L18/LLY	h44014a	001	Beta	0			GMT560
Panel Set: 1 schematic sheet1 67	$IVEDWORK/h44014a__001				Monday, September 1, 2003		Panel Set: 1

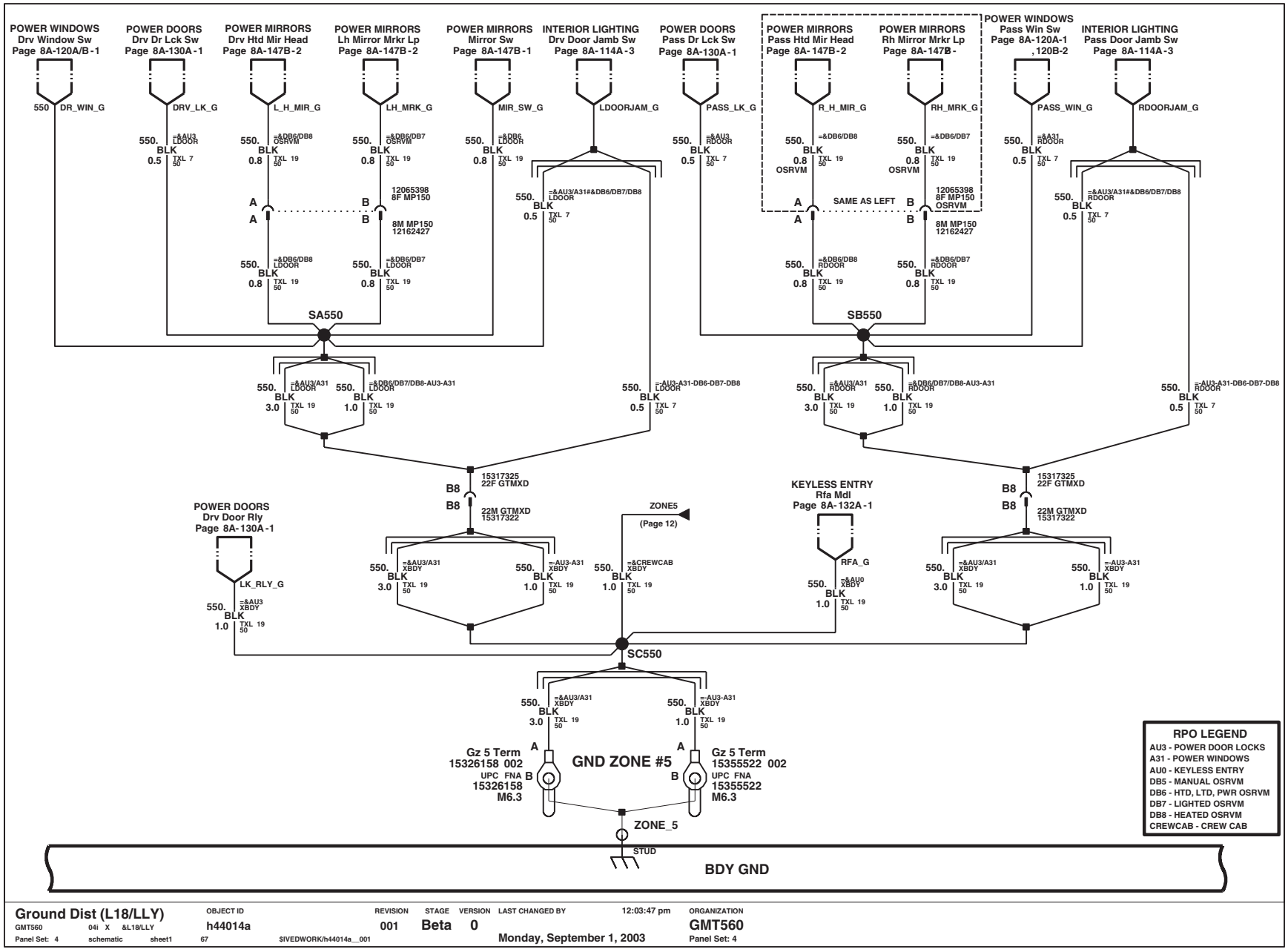
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax



Ground Distribution — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax

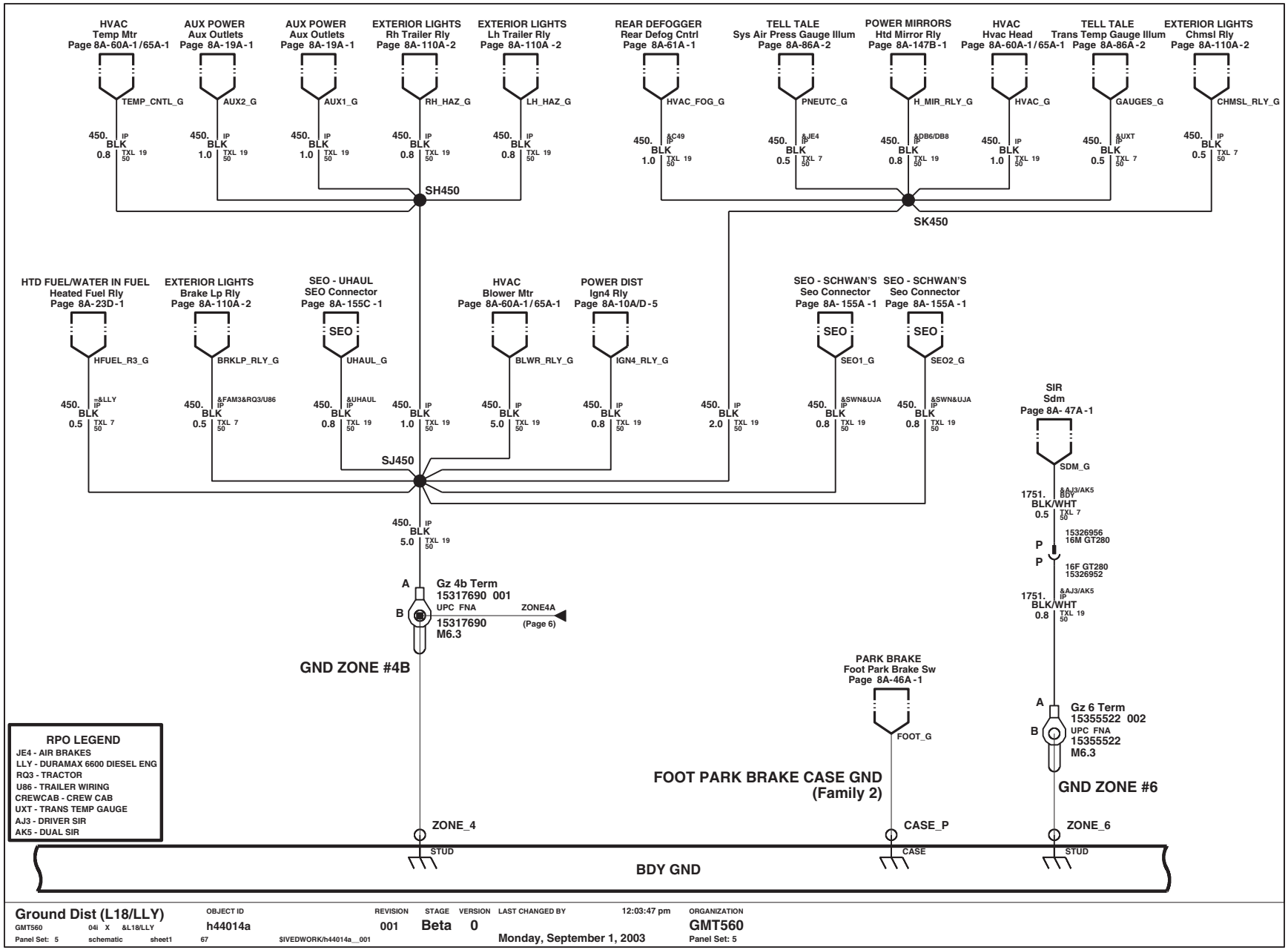


Ground Distribution — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax

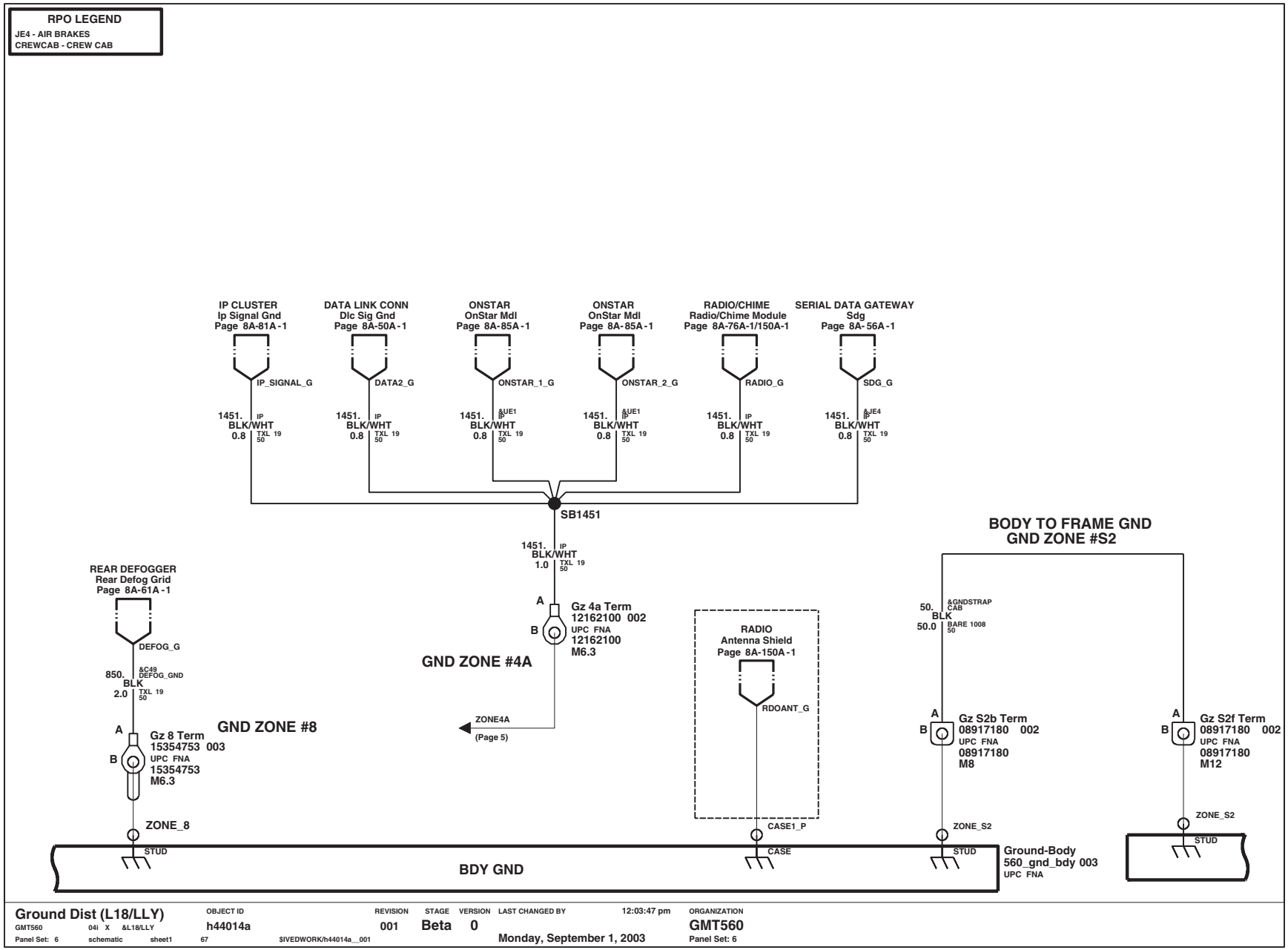


Ground Dist (L18/LLY)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY	12:03:47 pm	ORGANIZATION
GMT560 04i X &L18/LLY	h44014a	001	Beta	0			GMT560
Panel Set: 4 schematic sheet1 67 $IVEDWORK/h44014a__001					Monday, September 1, 2003		Panel Set: 4

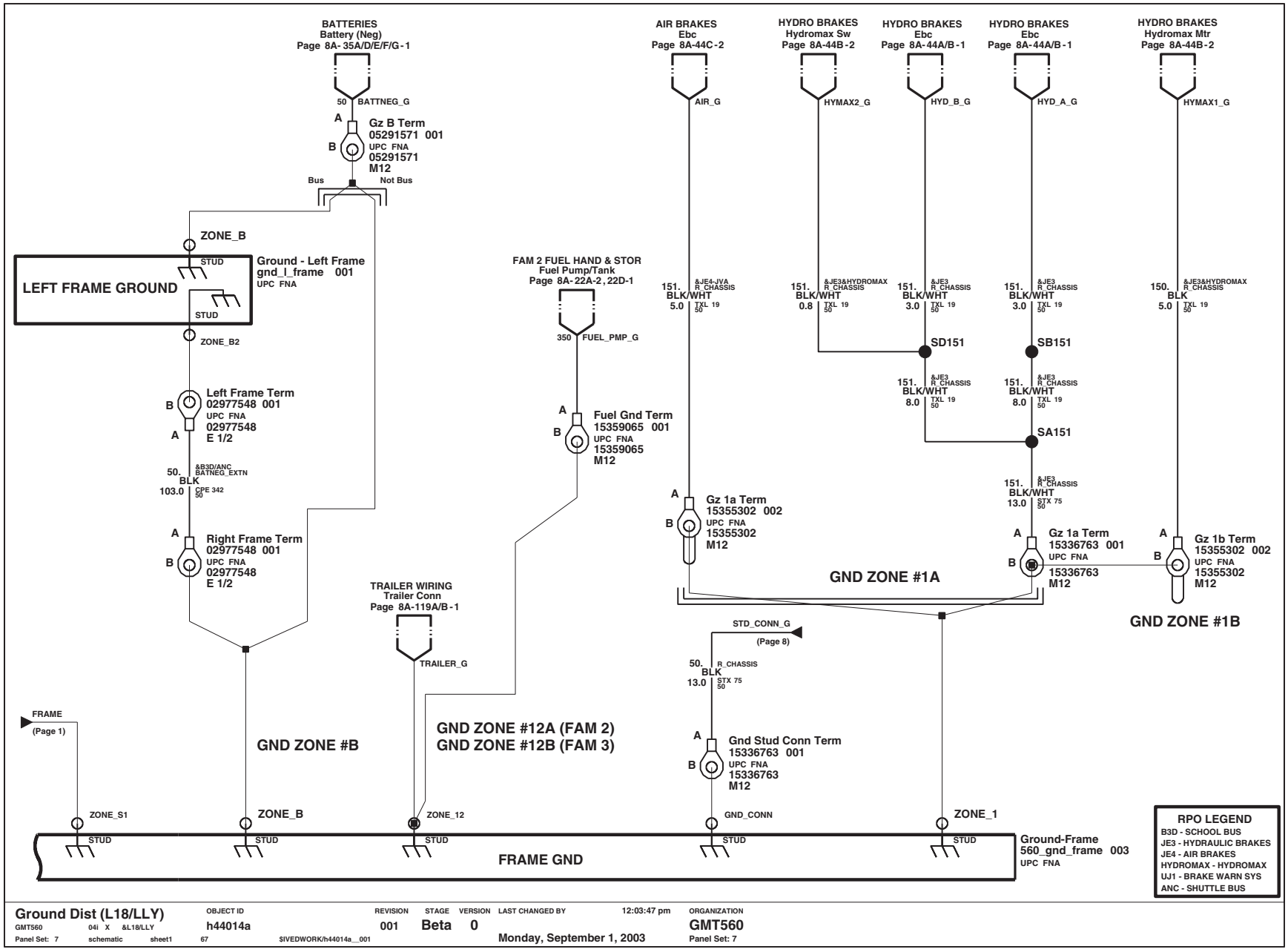
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax



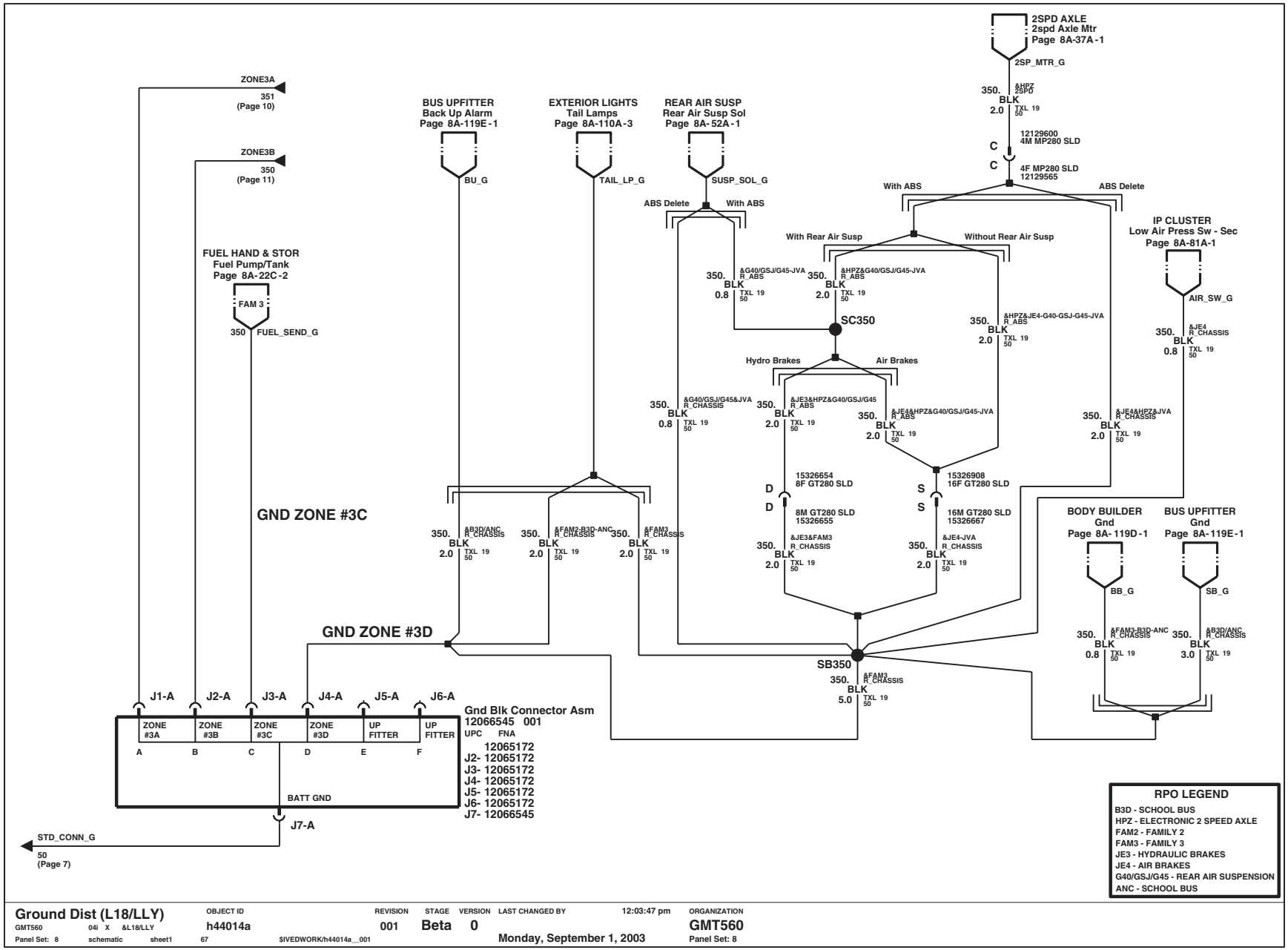
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax



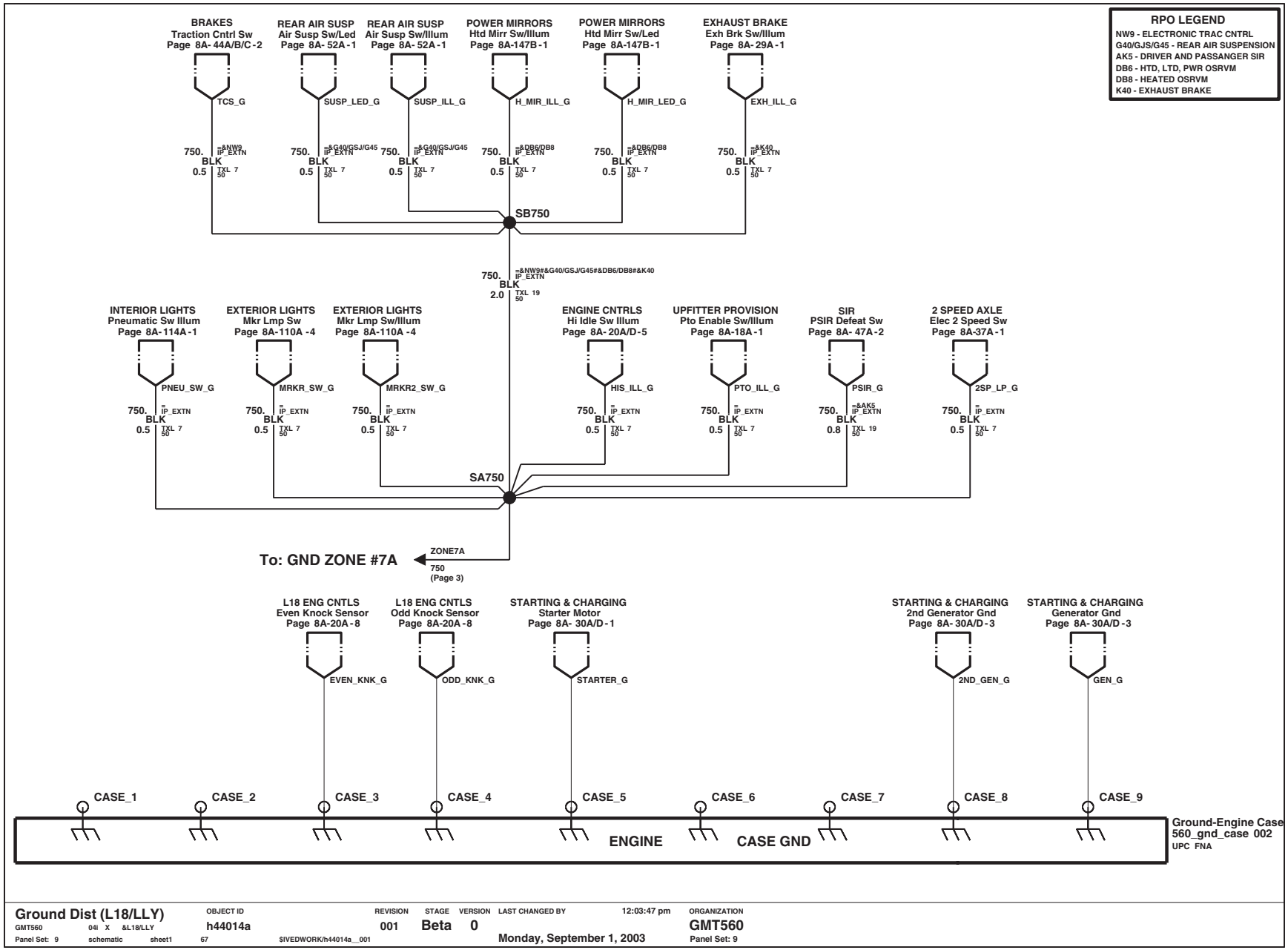
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax



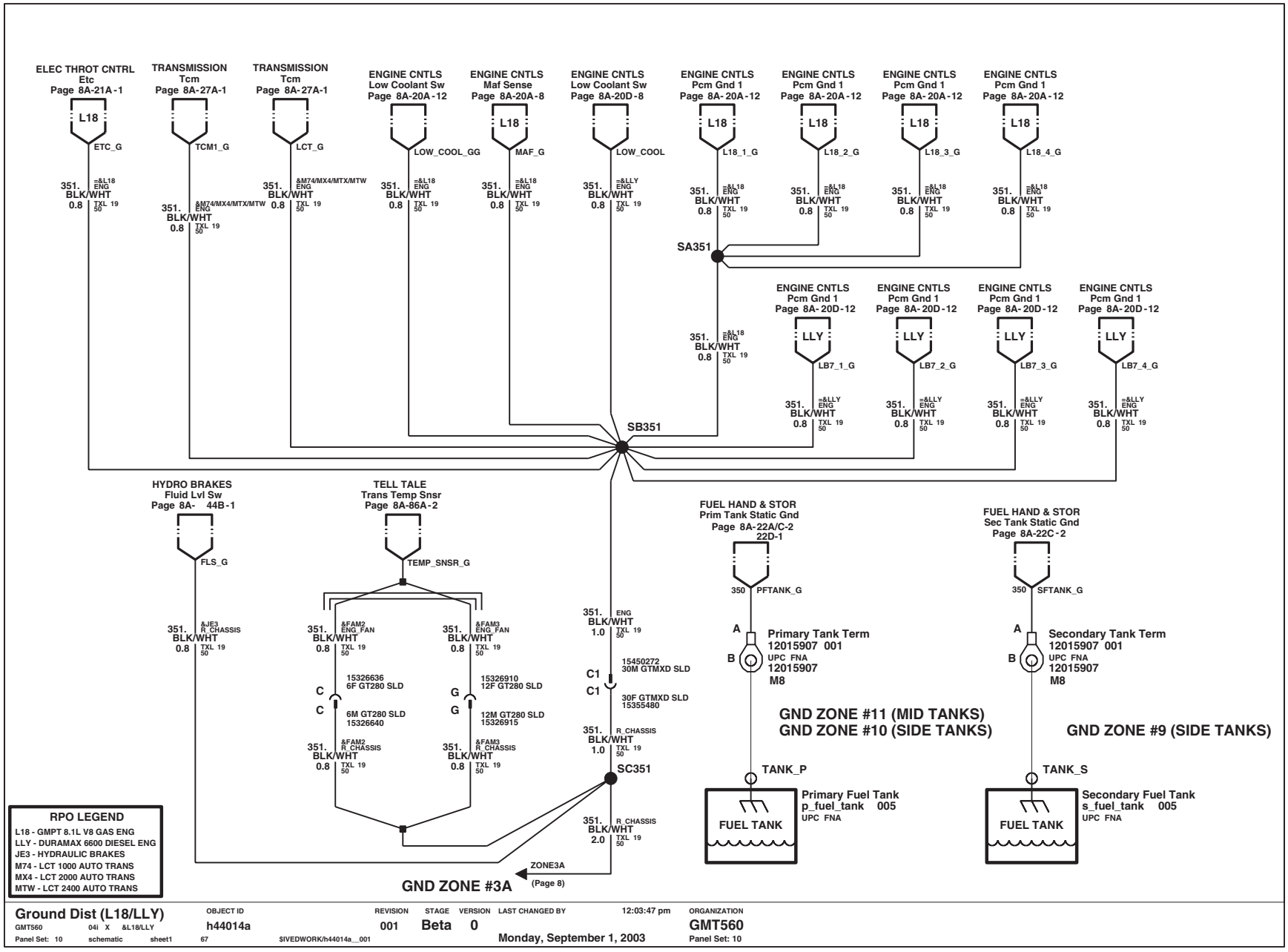
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax



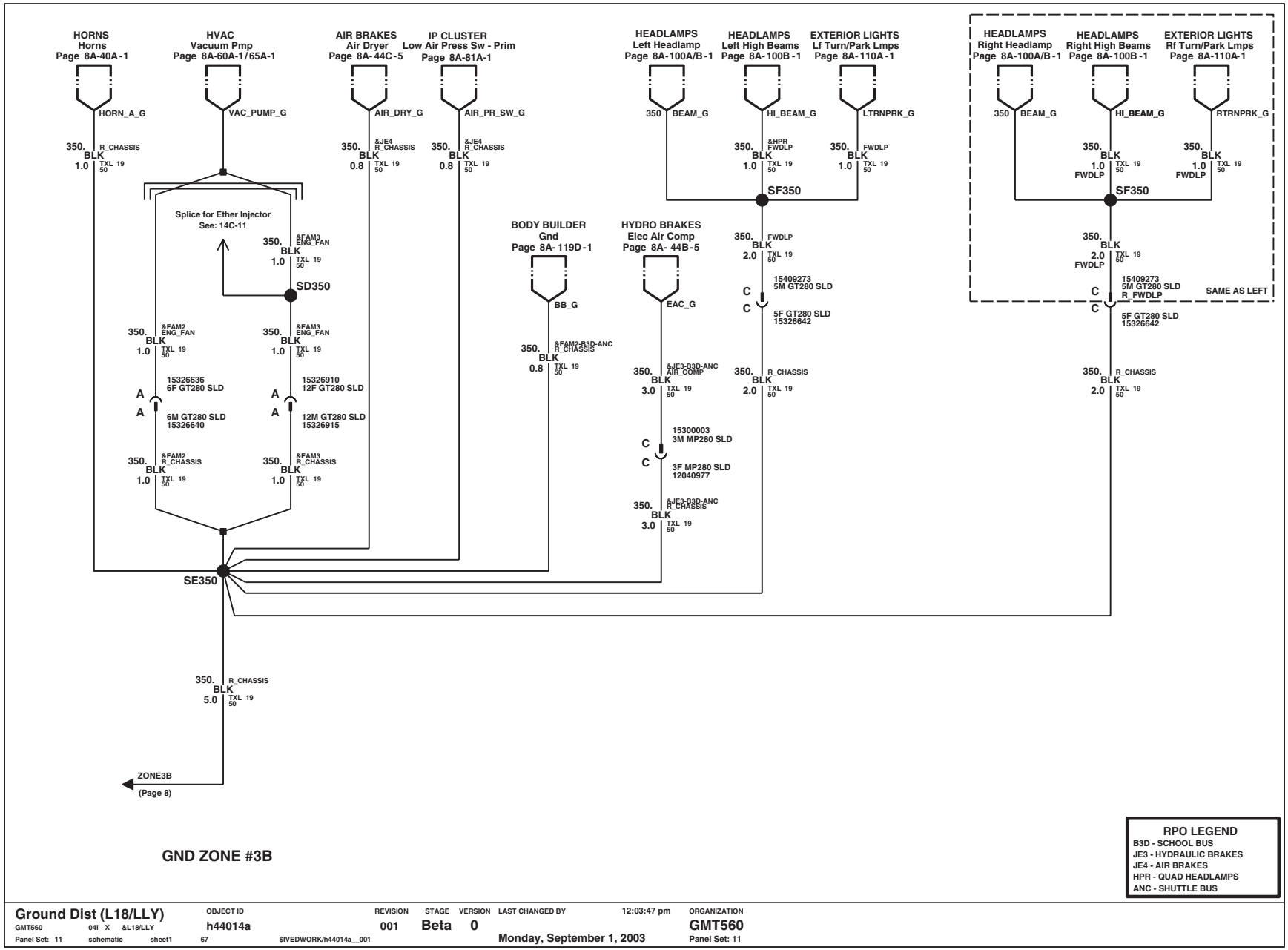
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax



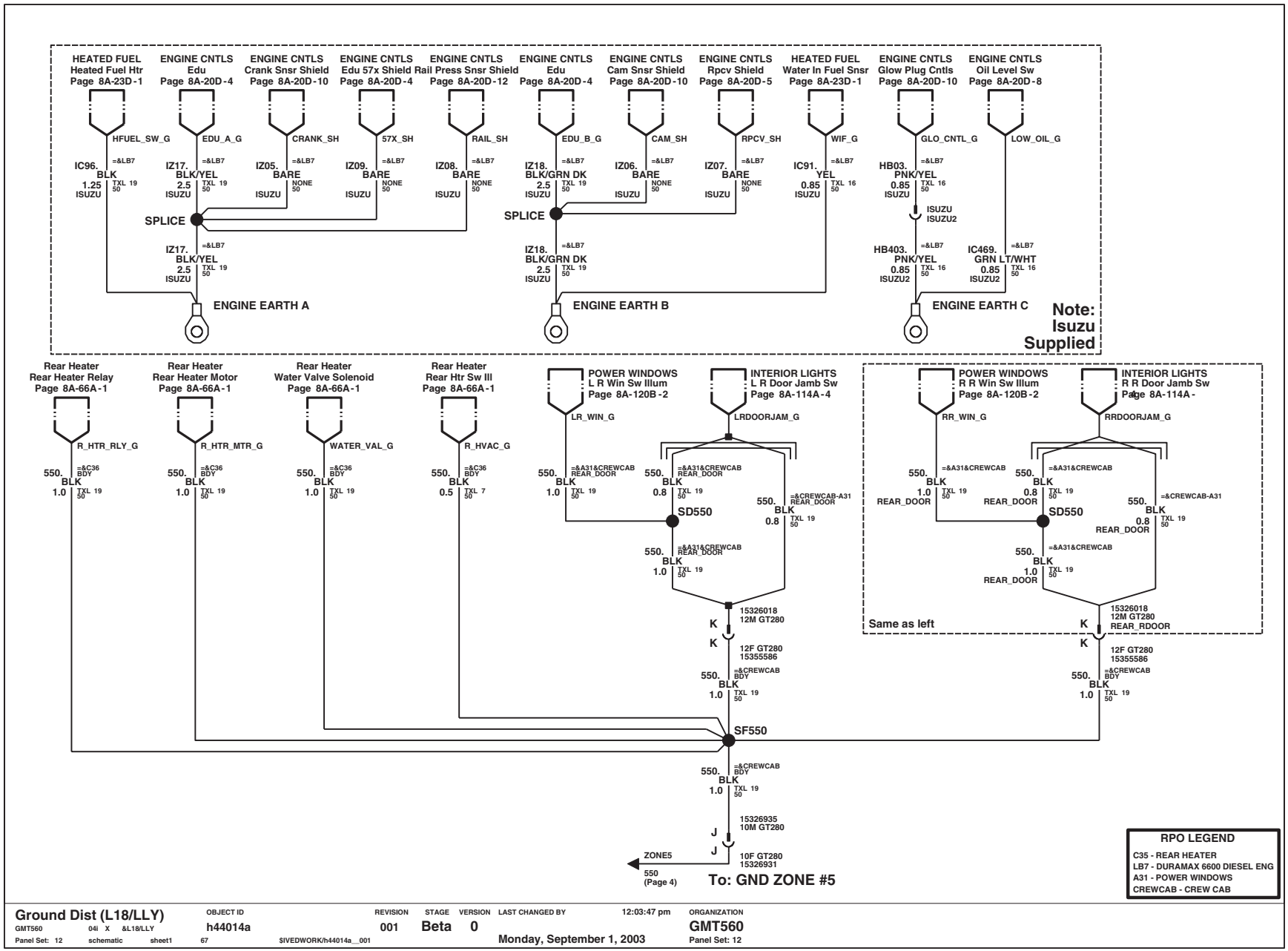
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax


ELEC THROT CNTRL Etc Page 8A-21A-1
TRANSMISSION Tcm Page 8A-27A-1
TRANSMISSION Tcm Page 8A-27A-1
ENGINE CNTLS Low Coolant Sw Page 8A-20A-12
ENGINE CNTLS Maf Sense Page 8A-20A-8
ENGINE CNTLS Low Coolant Sw Page 8A-20D-8
ENGINE CNTLS Pcm Gnd 1 Page 8A-20A-12
ENGINE CNTLS Pcm Gnd 1 Page 8A-20A-12
ENGINE CNTLS Pcm Gnd 1 Page 8A-20A-12
ENGINE CNTLS Pcm Gnd 1 Page 8A-20A-12
ENGINE CNTLS Pcm Gnd 1 Page 8A-20D-12
ENGINE CNTLS Pcm Gnd 1 Page 8A-20D-12
ENGINE CNTLS Pcm Gnd 1 Page 8A-20D-12
ENGINE CNTLS Pcm Gnd 1 Page 8A-20D-12
L18
LLY
ETC_G
TCM1_G
LCT_G
LOW_COOL_GG
MAF_G
LOW_COOL
L18_1_G
L18_2_G
L18_3_G
L18_4_G
LB7_1_G
LB7_2_G
LB7_3_G
LB7_4_G
SA351
SB351
HYDRO BRAKES Fluid Lvl Sw Page 8A- 44B-1
TELL TALE Trans Temp Snsr Page 8A-86A-2
FLS_G
TEMP_SNSR_G
15326636 6F GT280 SLD
6M GT280 SLD 15326640
15326910 12F GT280 SLD
12M GT280 SLD 15326915
15450272 30M GTMXD SLD
30F GTMXD SLD 15355480
SC351
FUEL HAND & STOR Prim Tank Static Gnd Page 8A-22A/C-2 22D-1
FUEL HAND & STOR Sec Tank Static Gnd Page 8A-22C-2
PFTANK_G
SFTANK_G
Primary Tank Term 12015907 001
UPC FNA 12015907 M8
Secondary Tank Term 12015907 001
UPC FNA 12015907 M8
GND ZONE #11 (MID TANKS)
GND ZONE #10 (SIDE TANKS)
GND ZONE #9 (SIDE TANKS)
TANK_P
TANK_S
Primary Fuel Tank p_fuel_tank 005 UPC FNA
Secondary Fuel Tank s_fuel_tank 005 UPC FNA
FUEL TANK
RPO LEGEND
L18 - GMPT 8.1L V8 GAS ENG
LLY - DURAMAX 6600 DIESEL ENG
JE3 - HYDRAULIC BRAKES
M74 - LCT 1000 AUTO TRANS
MX4 - LCT 2000 AUTO TRANS
MTW - LCT 2400 AUTO TRANS
GND ZONE #3A
ZONE3A (Page 8)
Ground Dist (L18/LLY)
OBJECT ID h44014a
REVISION 001 STAGE Beta VERSION 0 LAST CHANGED BY
12:03:47 pm Monday, September 1, 2003
ORGANIZATION GMT560
GMT560 04i X &L18/LLY
Panel Set: 10 schematic sheet1 67 $IVEDWORK/h44014a__001
Panel Set: 10

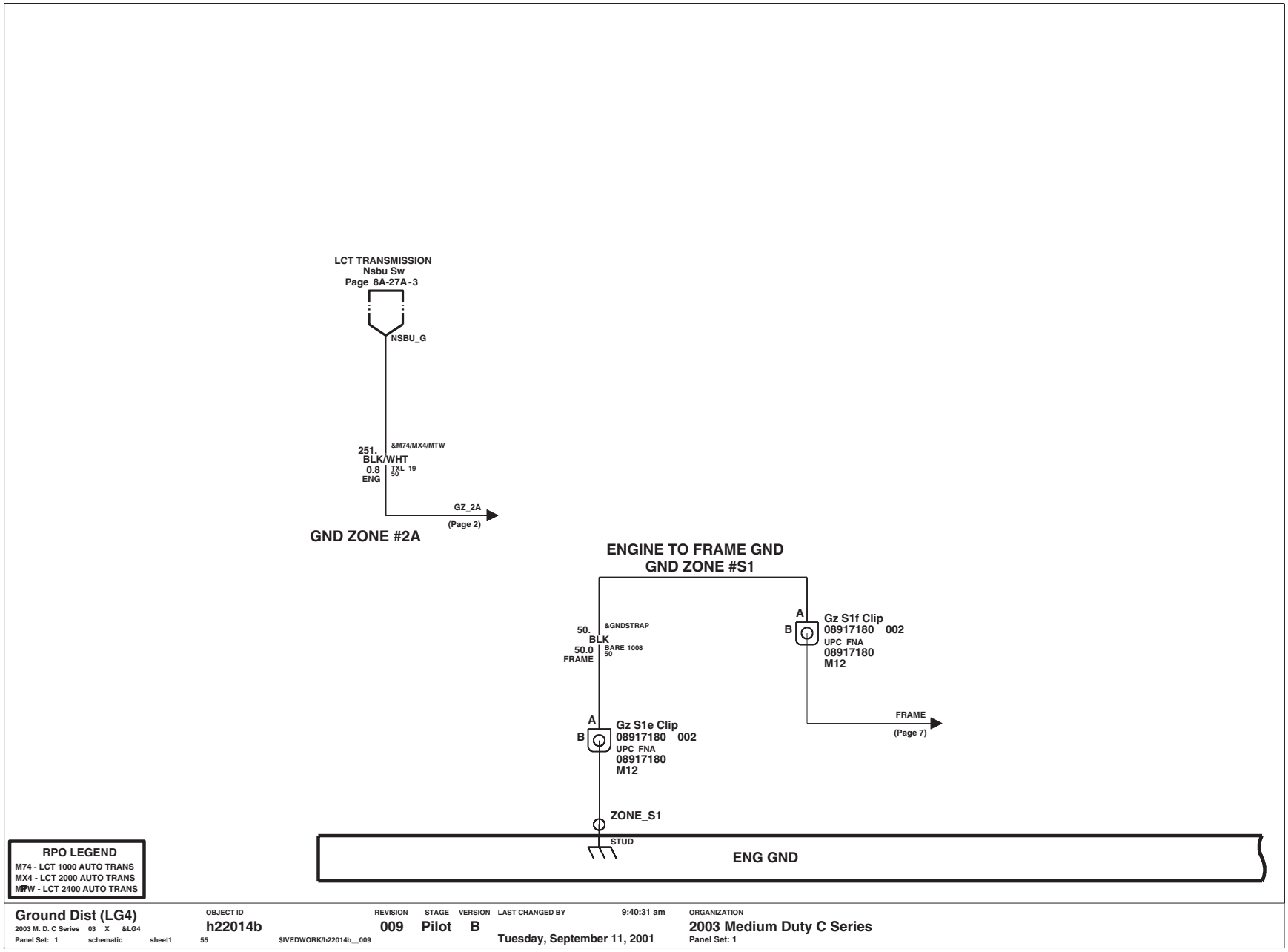
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax



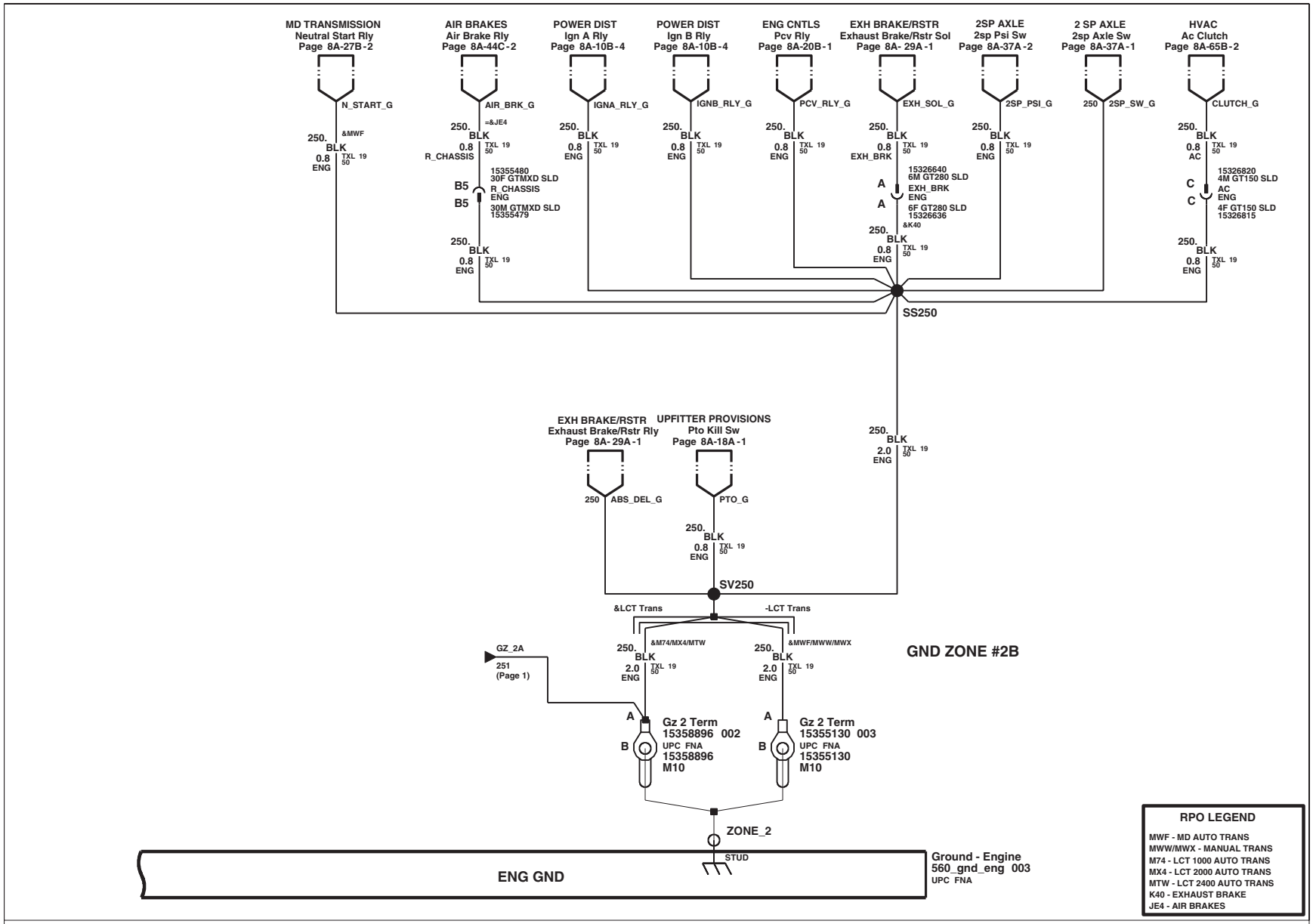
Ground Distribution — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax



Ground Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax



Ground Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax

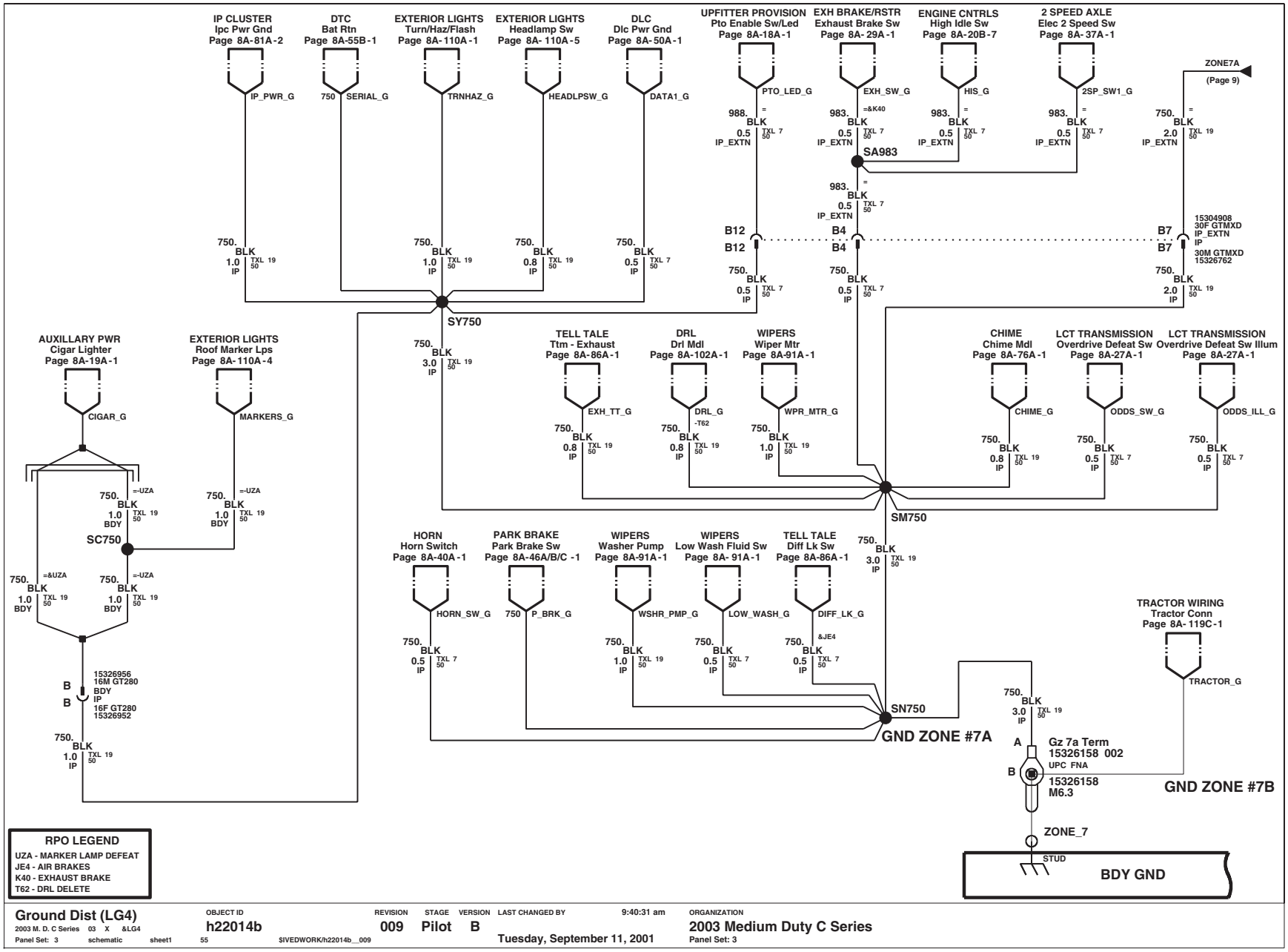


Ground Dist (LG4)
2003 M. D. C Series 03 X &LG4
Panel Set: 2 schematic sheet1 55

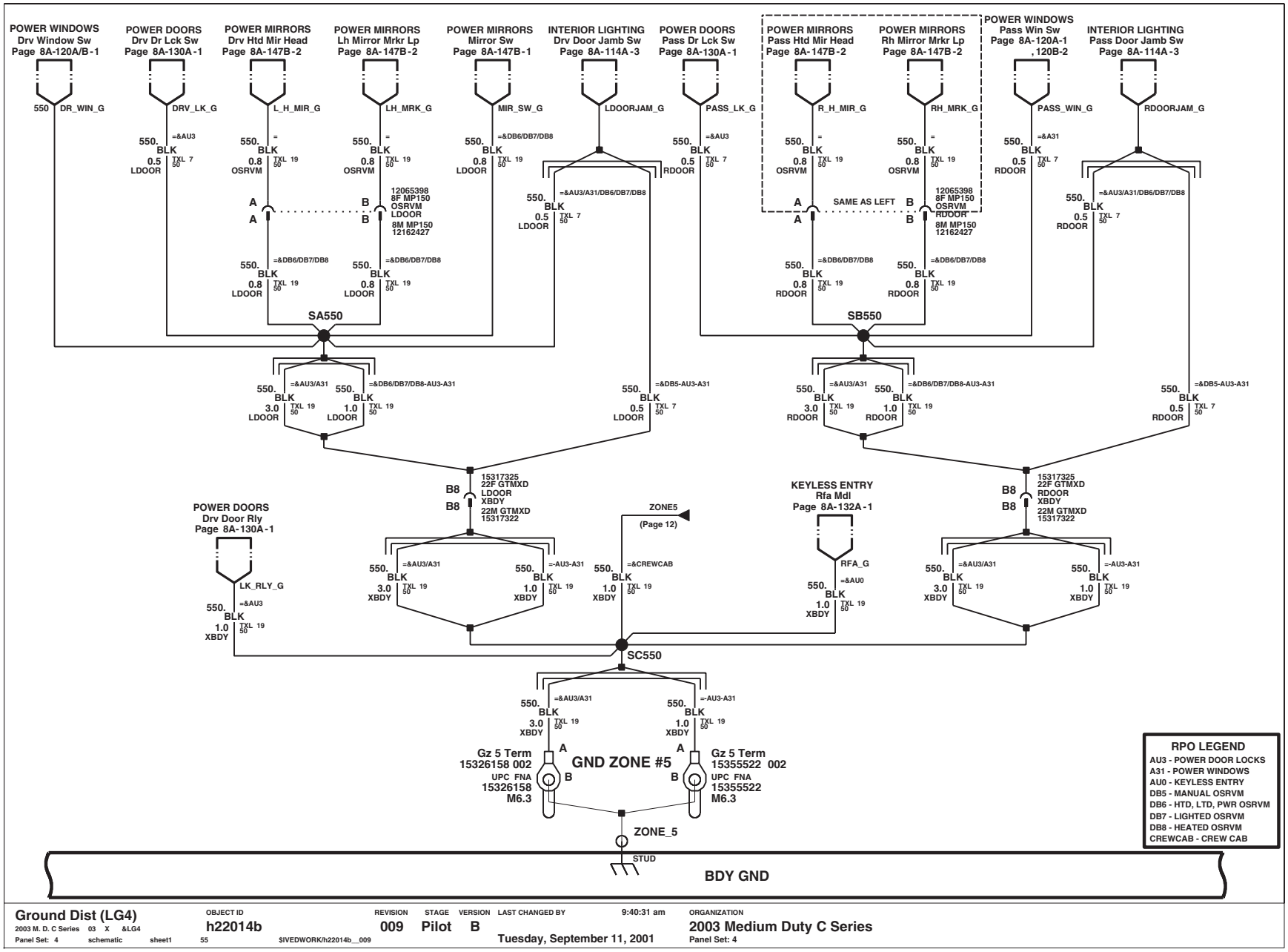
OBJECT ID h22014b
REVISION 009
STAGE Pilot
VERSION B
LAST CHANGED BY
9:40:31 am Tuesday, September 11, 2001
$IVEDWORK/h22014b__009

ORGANIZATION
2003 Medium Duty C Series
Panel Set: 2

Ground Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax



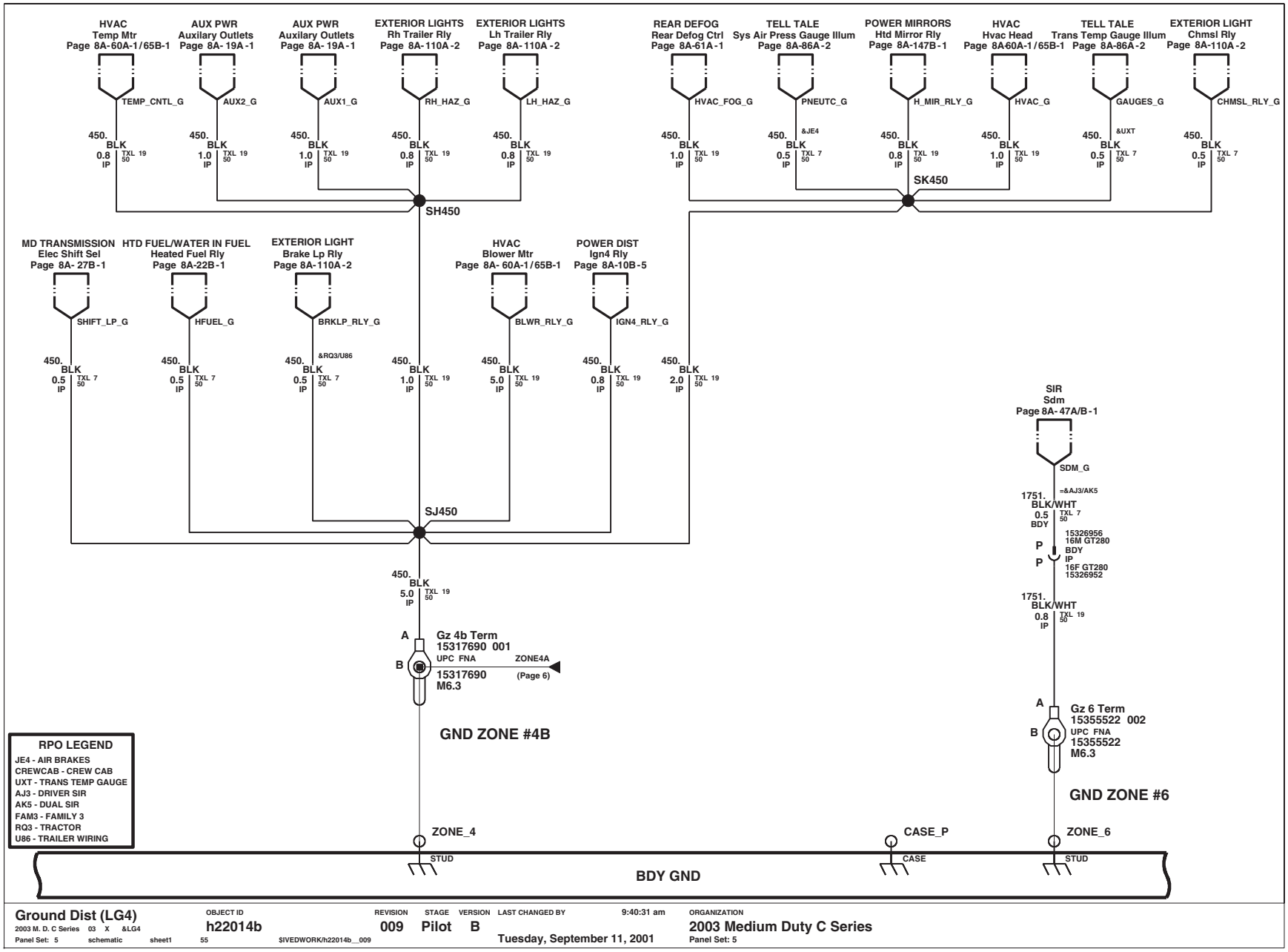
Ground Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax



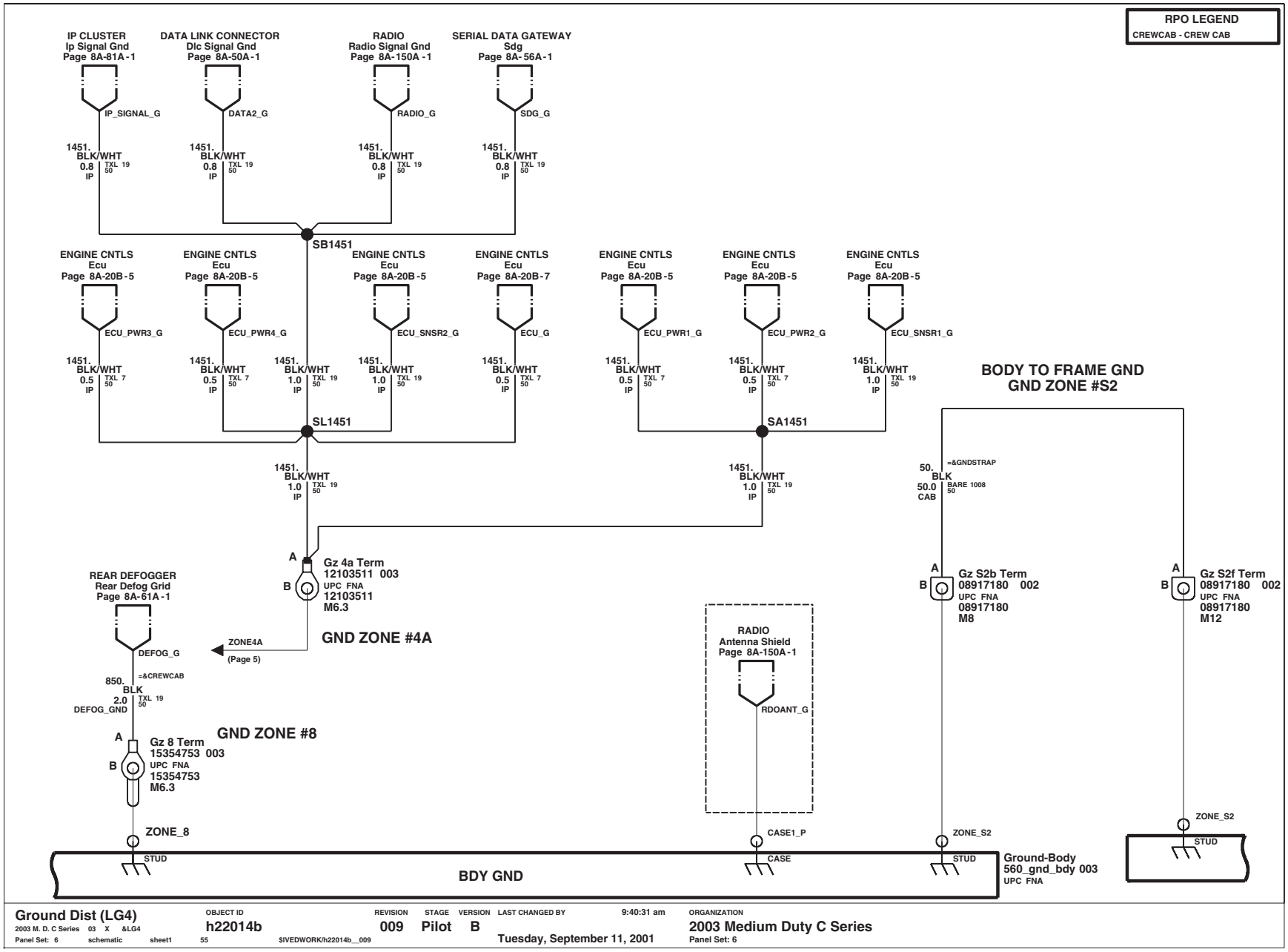
Ground Dist (LG4)
2003 M. D. C Series 03 X &LG4
Panel Set: 4 schematic sheet1 55

OBJECT ID: h22014b
REVISION: 009
STAGE: Pilot
VERSION: B
LAST CHANGED BY: $IVEDWORK/h22014b__009
9:40:31 am Tuesday, September 11, 2001
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 4

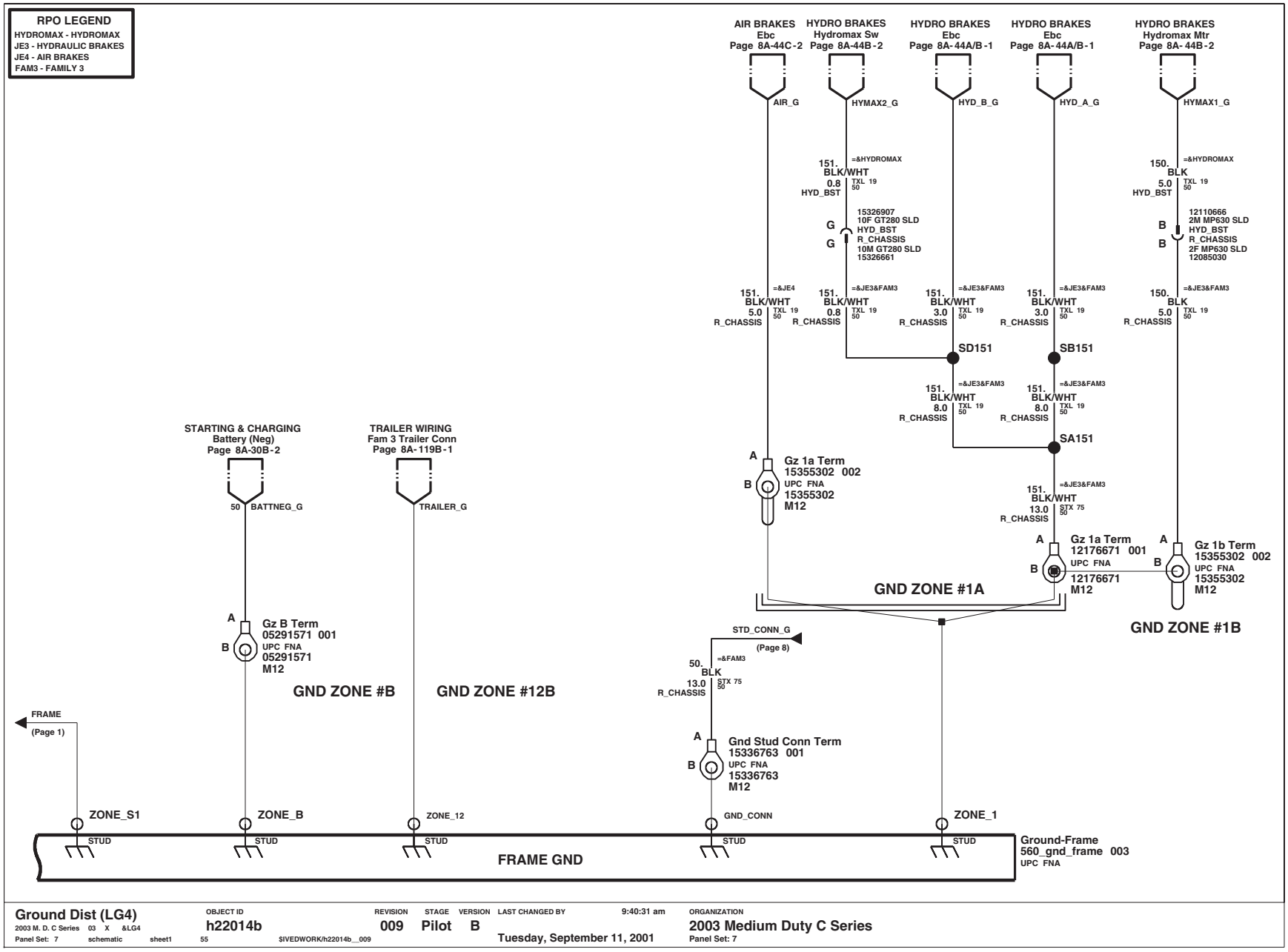
Ground Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax



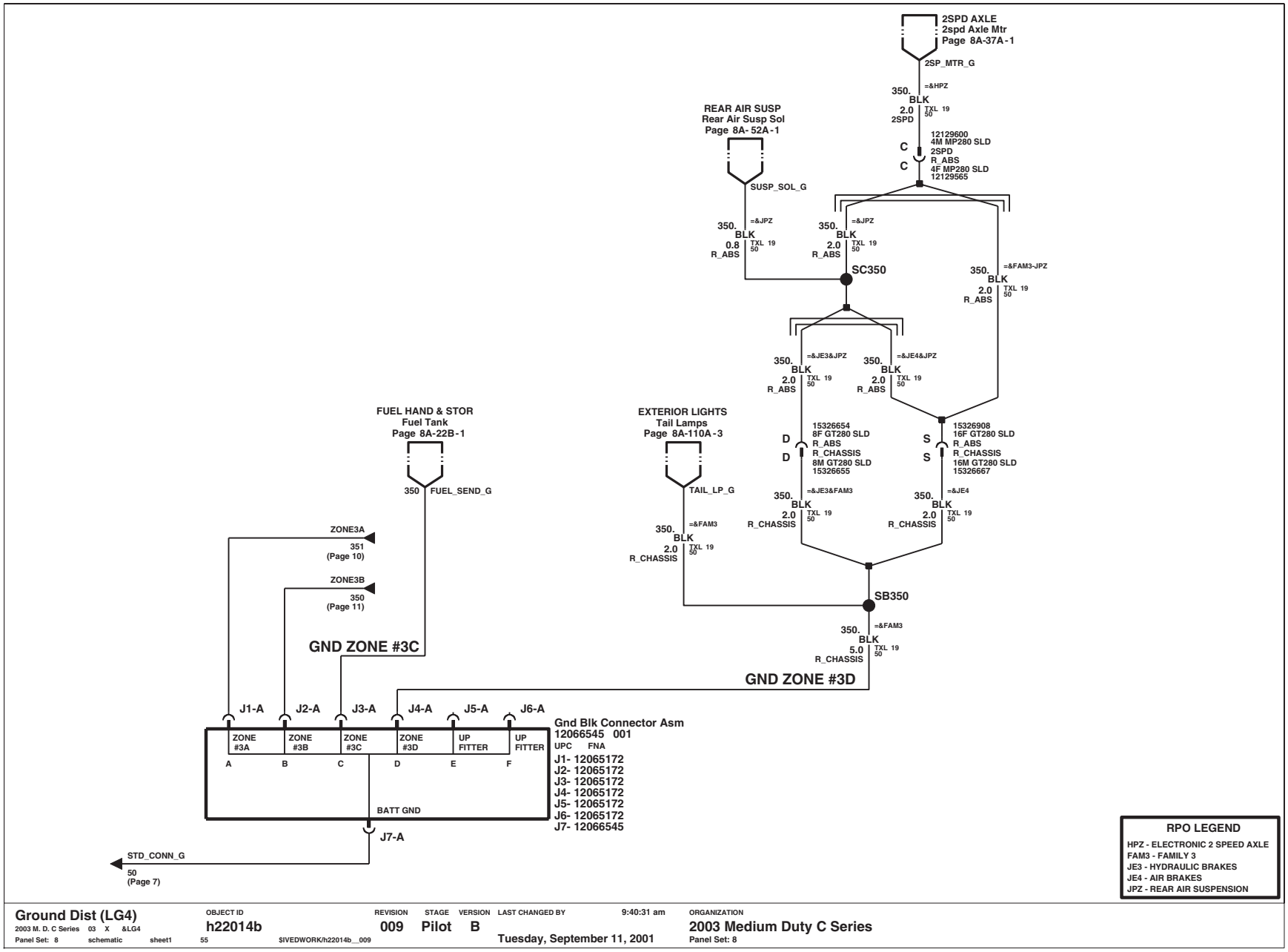
Ground Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax



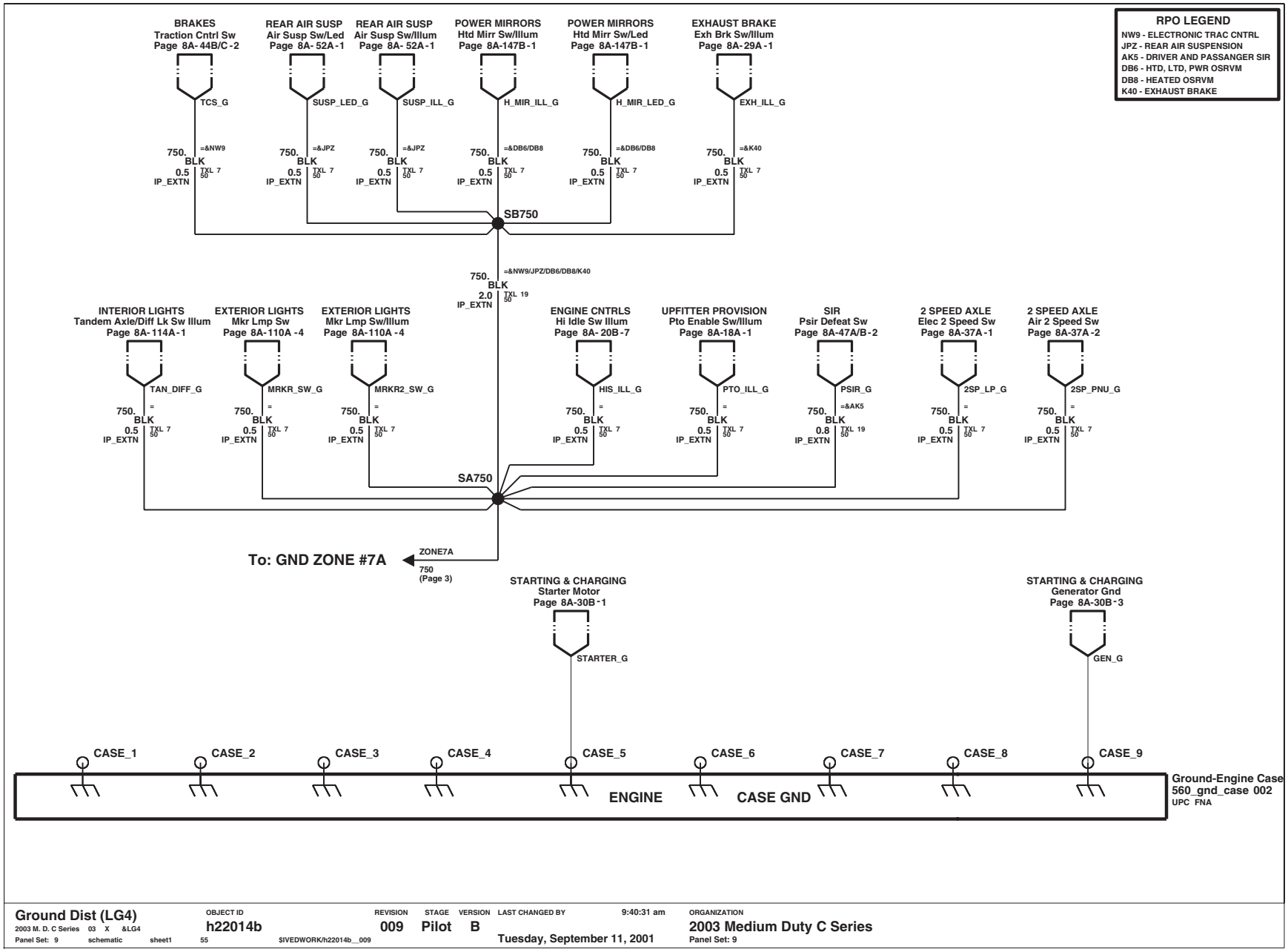
Ground Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax



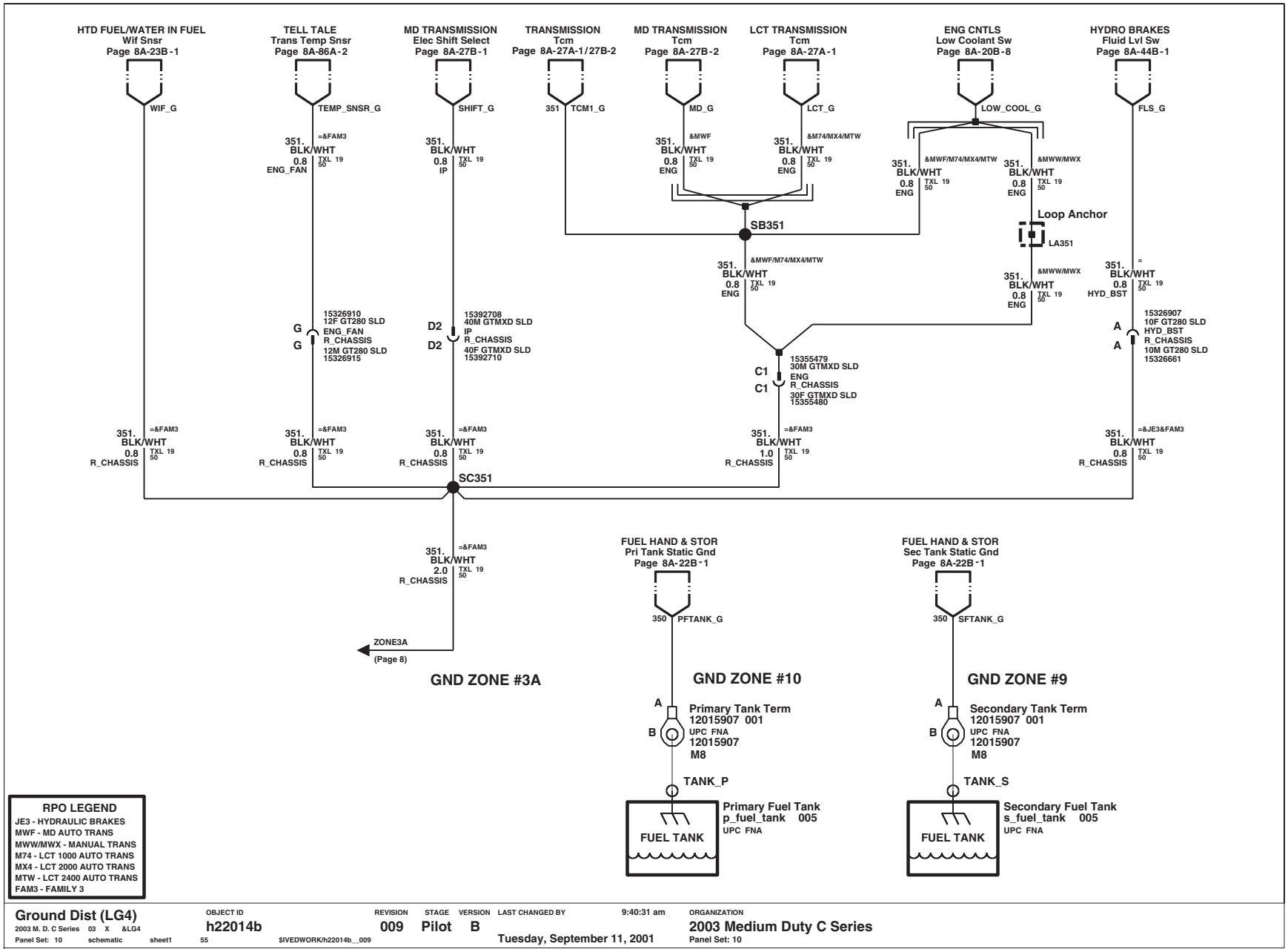
Ground Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax



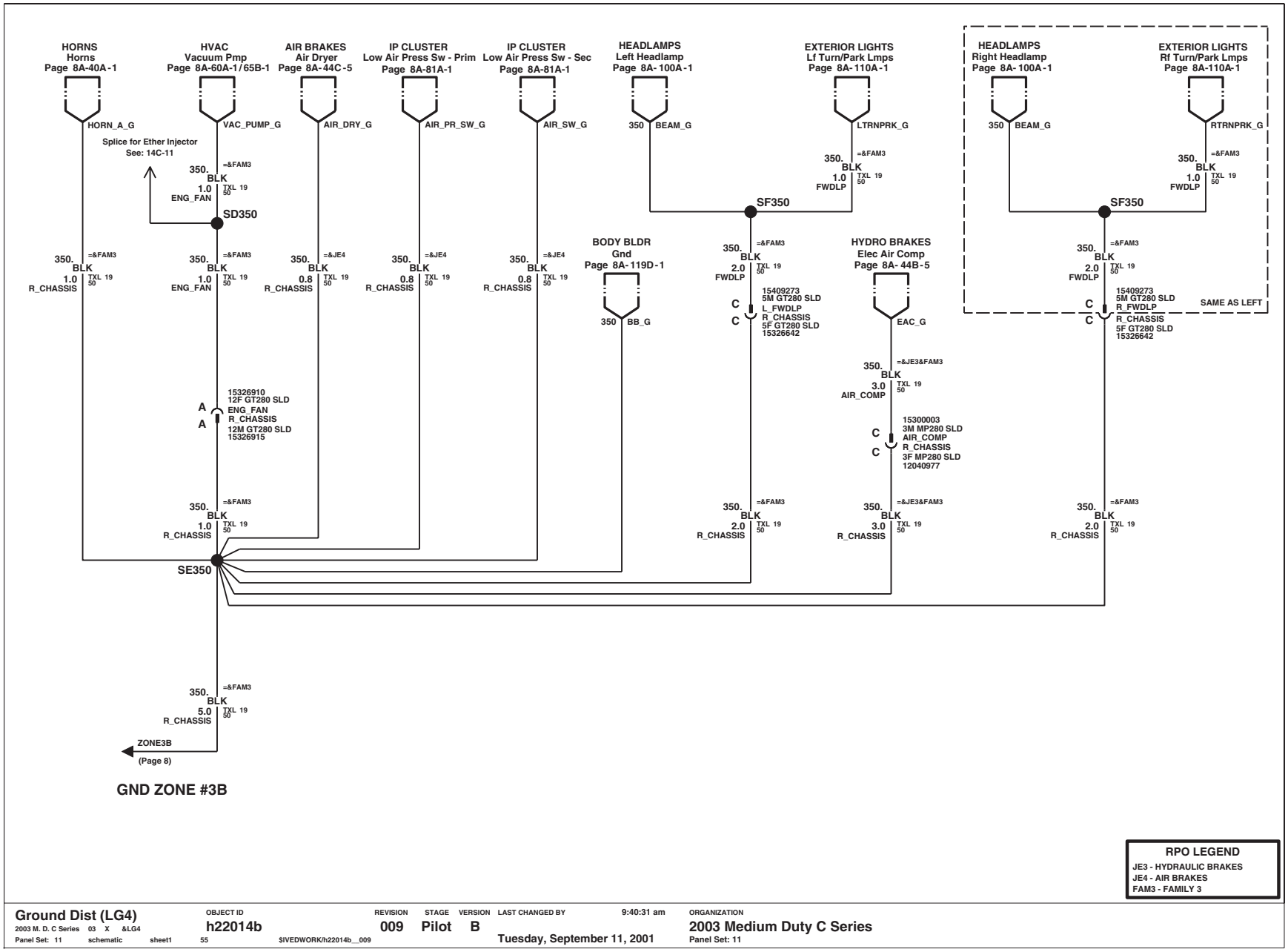
Ground Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax



Ground Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax

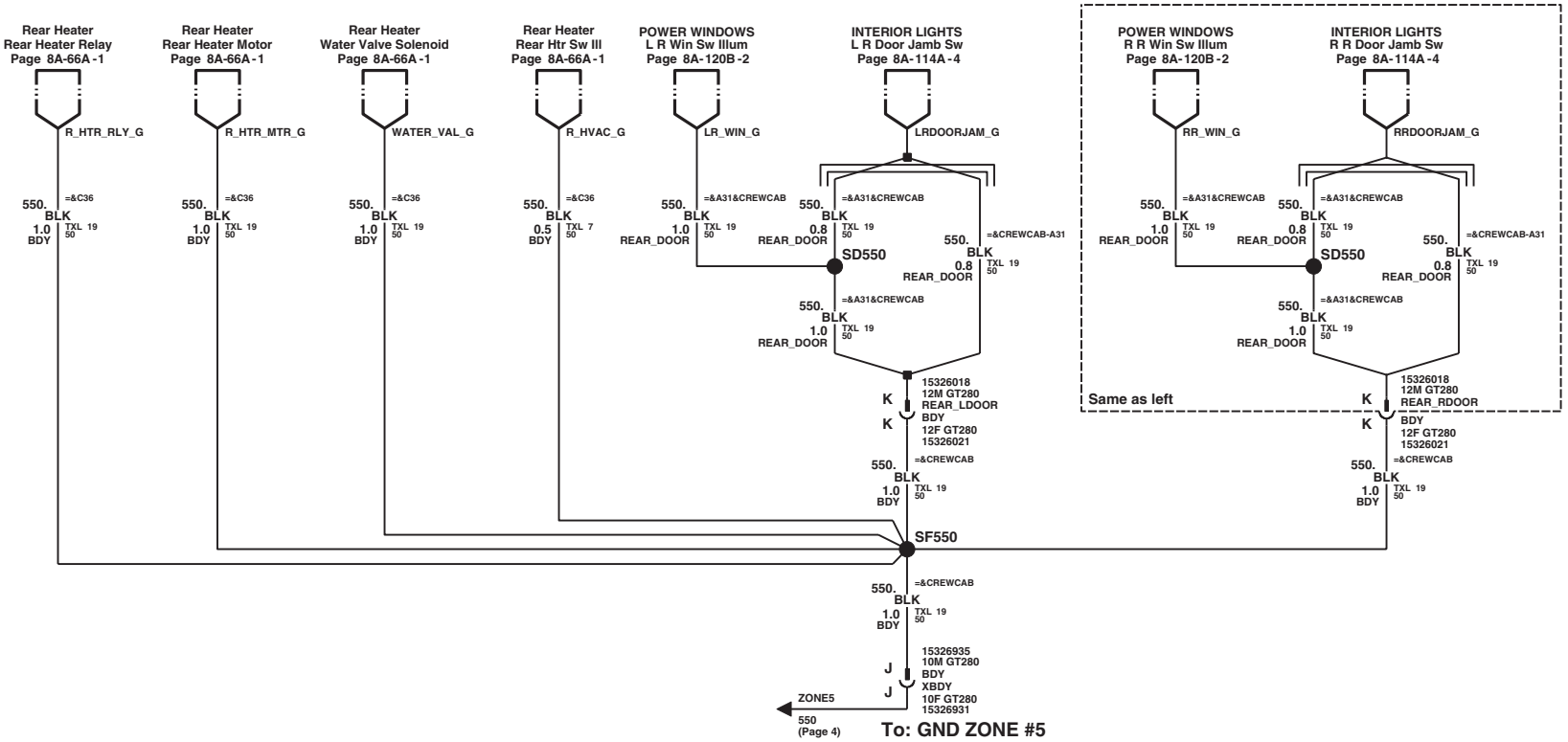

HTD FUEL/WATER IN FUEL
Wif Snsr
Page 8A-23B-1
WIF_G
TELL TALE
Trans Temp Snsr
Page 8A-86A-2
TEMP_SNSR_G
MD TRANSMISSION
Elec Shift Select
Page 8A-27B-1
SHIFT_G
TRANSMISSION
Tcm
Page 8A-27A-1/27B-2
351 TCM1_G
MD TRANSMISSION
Tcm
Page 8A-27B-2
MD_G
LCT TRANSMISSION
Tcm
Page 8A-27A-1
LCT_G
ENG CNTLS
Low Coolant Sw
Page 8A-20B-8
LOW_COOL_G
HYDRO BRAKES
Fluid Lvl Sw
Page 8A-44B-1
FLS_G
351. BLK/WHT 0.8 TXL 19 50 =&FAM3 ENG_FAN
351. BLK/WHT 0.8 TXL 19 50 IP
351. BLK/WHT 0.8 TXL 19 50 &MWF ENG
351. BLK/WHT 0.8 TXL 19 50 &M74/MX4/MTW ENG
351. BLK/WHT 0.8 TXL 19 50 &MWF/M74/MX4/MTW ENG
351. BLK/WHT 0.8 TXL 19 50 &MWW/MWX ENG
SB351
Loop Anchor
LA351
351. BLK/WHT 0.8 TXL 19 50 &MWF/M74/MX4/MTW ENG
351. BLK/WHT 0.8 TXL 19 50 &MWW/MWX ENG
351. BLK/WHT 0.8 TXL 19 50 = HYD_BST
G G 15326910 12F GT280 SLD ENG_FAN R_CHASSIS 12M GT280 SLD 15326915
D2 D2 15392708 40M GTMXD SLD IP R_CHASSIS 40F GTMXD SLD 15392710
C1 C1 15355479 30M GTMXD SLD ENG R_CHASSIS 30F GTMXD SLD 15355480
A A 15326907 10F GT280 SLD HYD_BST R_CHASSIS 10M GT280 SLD 15326661
351. BLK/WHT 0.8 TXL 19 50 =&FAM3 R_CHASSIS
351. BLK/WHT 0.8 TXL 19 50 =&FAM3 R_CHASSIS
351. BLK/WHT 0.8 TXL 19 50 =&FAM3 R_CHASSIS
351. BLK/WHT 1.0 TXL 19 50 =&FAM3 R_CHASSIS
351. BLK/WHT 0.8 TXL 19 50 =&JE3&FAM3 R_CHASSIS
SC351
351. BLK/WHT 2.0 TXL 19 50 =&FAM3 R_CHASSIS
ZONE3A
(Page 8)
GND ZONE #3A
FUEL HAND & STOR
Pri Tank Static Gnd
Page 8A-22B-1
350 PFTANK_G
GND ZONE #10
A B Primary Tank Term 12015907 001 UPC FNA 12015907 M8
TANK_P
FUEL TANK
Primary Fuel Tank p_fuel_tank 005 UPC FNA
FUEL HAND & STOR
Sec Tank Static Gnd
Page 8A-22B-1
350 SFTANK_G
GND ZONE #9
A B Secondary Tank Term 12015907 001 UPC FNA 12015907 M8
TANK_S
FUEL TANK
Secondary Fuel Tank s_fuel_tank 005 UPC FNA
RPO LEGEND
JE3 - HYDRAULIC BRAKES
MWF - MD AUTO TRANS
MWW/MWX - MANUAL TRANS
M74 - LCT 1000 AUTO TRANS
MX4 - LCT 2000 AUTO TRANS
MTW - LCT 2400 AUTO TRANS
FAM3 - FAMILY 3
Ground Dist (LG4)
2003 M. D. C Series 03 X &LG4
Panel Set: 10 schematic sheet1 55
OBJECT ID h22014b
REVISION 009
STAGE Pilot
VERSION B
LAST CHANGED BY
9:40:31 am Tuesday, September 11, 2001
ORGANIZATION 2003 Medium Duty C Series
Panel Set: 10
$IVEDWORK/h22014b__009

Ground Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax



Ground Distribution — (LG4-'03-'04) 7.8L-Diesel/Duramax

03 560 000	JG	PILOT - INITIAL CREATION	09FE00	001
03 560 682	LR	REVISED PILOT MECH RELEASE REV A	15MY00	001
03 560 805	JG	Misc. Updates	30OC00	001
03 560 814	JG	R_ABS to R_CHASSIS inline update	02NO00	001
03 560 818	JG	Various Grounding Updates	28NO00	001
03 560 839	JG	Gz 6 Updates (Ring Term & Gauge)	19DE00	001
03 560 873	JG	Remove V04; Inline Update, Gauge Update	06FE01	001
03 560 983	JG	Engine Ground Strap Update	10AP01	001
03 560 1012	JG	Ground Zone 2 Ring Terminal Update	02MY01	001
03 560 1056	LR	REMOVE LC8	18JL01	001
03 560 1058	JG	Ground Block Ring Terminal Update	20JL01	001
03 560 1096	JG	Ground Zone #5 Ring Term Update	11SE01	001

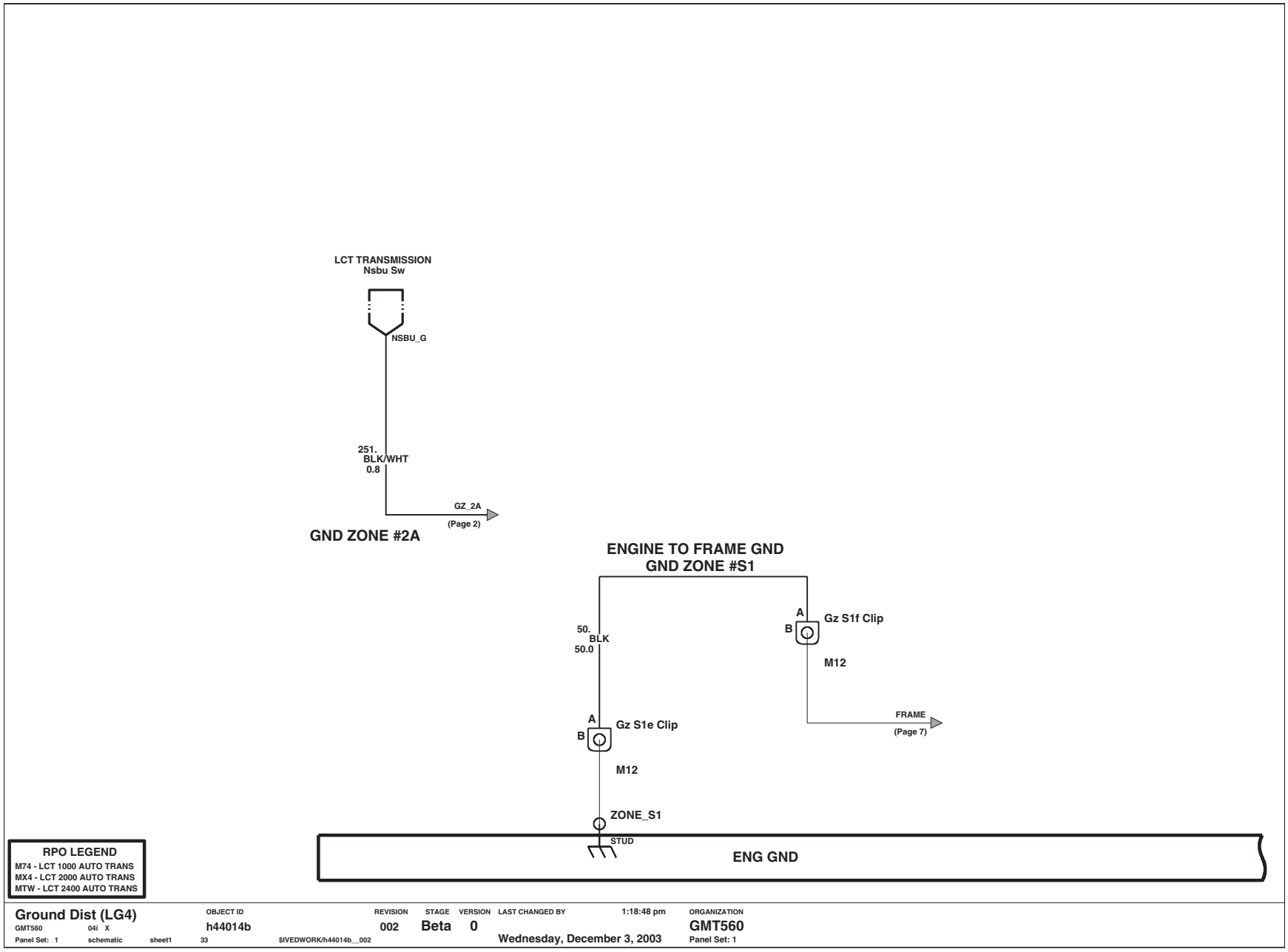


RPO LEGEND
A31 - POWER WINDOWS
C35 - REAR HEATER
CREWCAB - CREW CAB

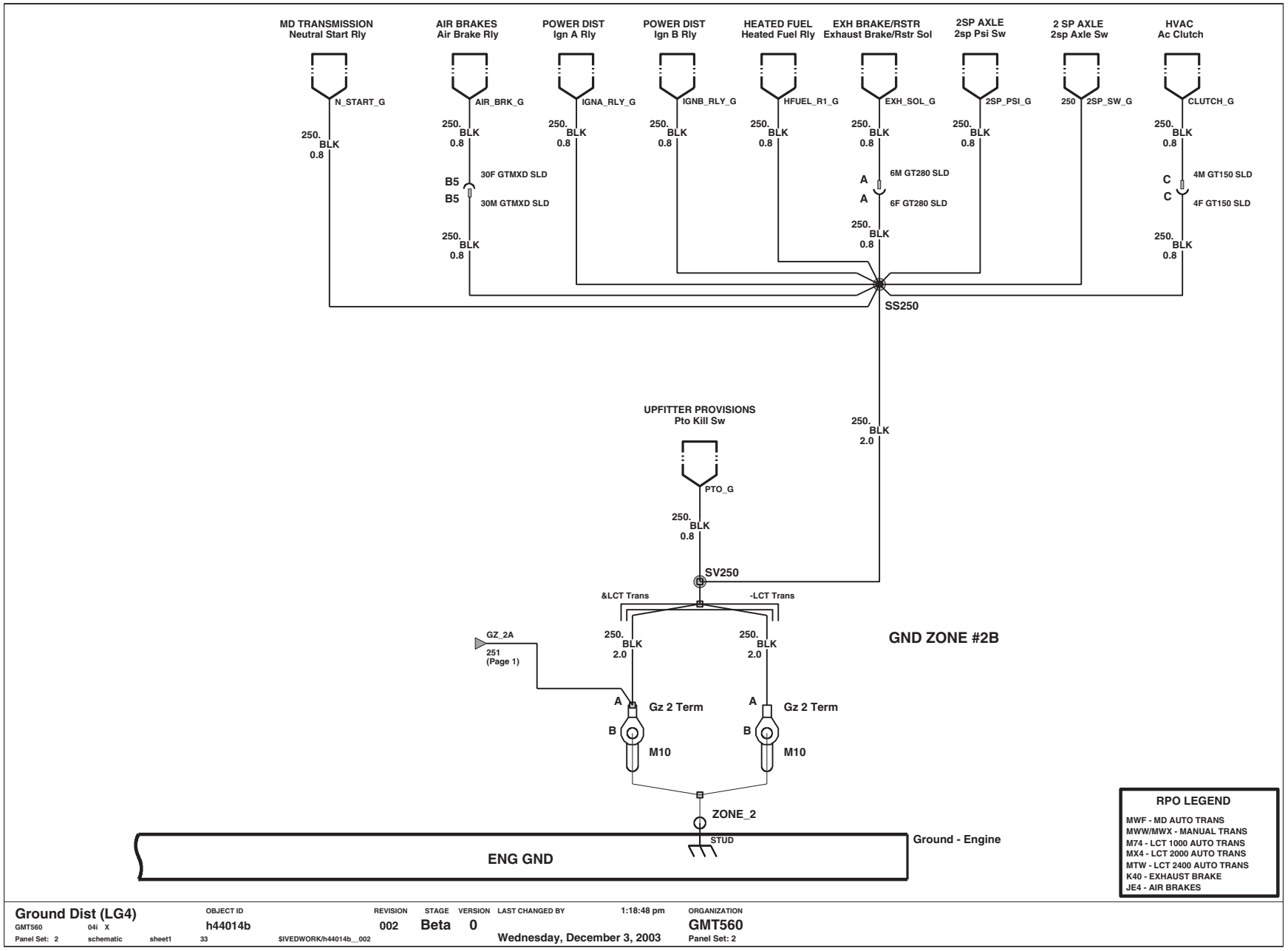
Ground Dist (LG4)
2003 M. D. C Series 03 X &LG4
Panel Set: 12 schematic sheet1 55 $IVEDWORK/h22014b__009

OBJECT ID: h22014b
REVISION: 009
STAGE: Pilot
VERSION: B
LAST CHANGED BY: Tuesday, September 11, 2001 9:40:31 am
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 12

Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax

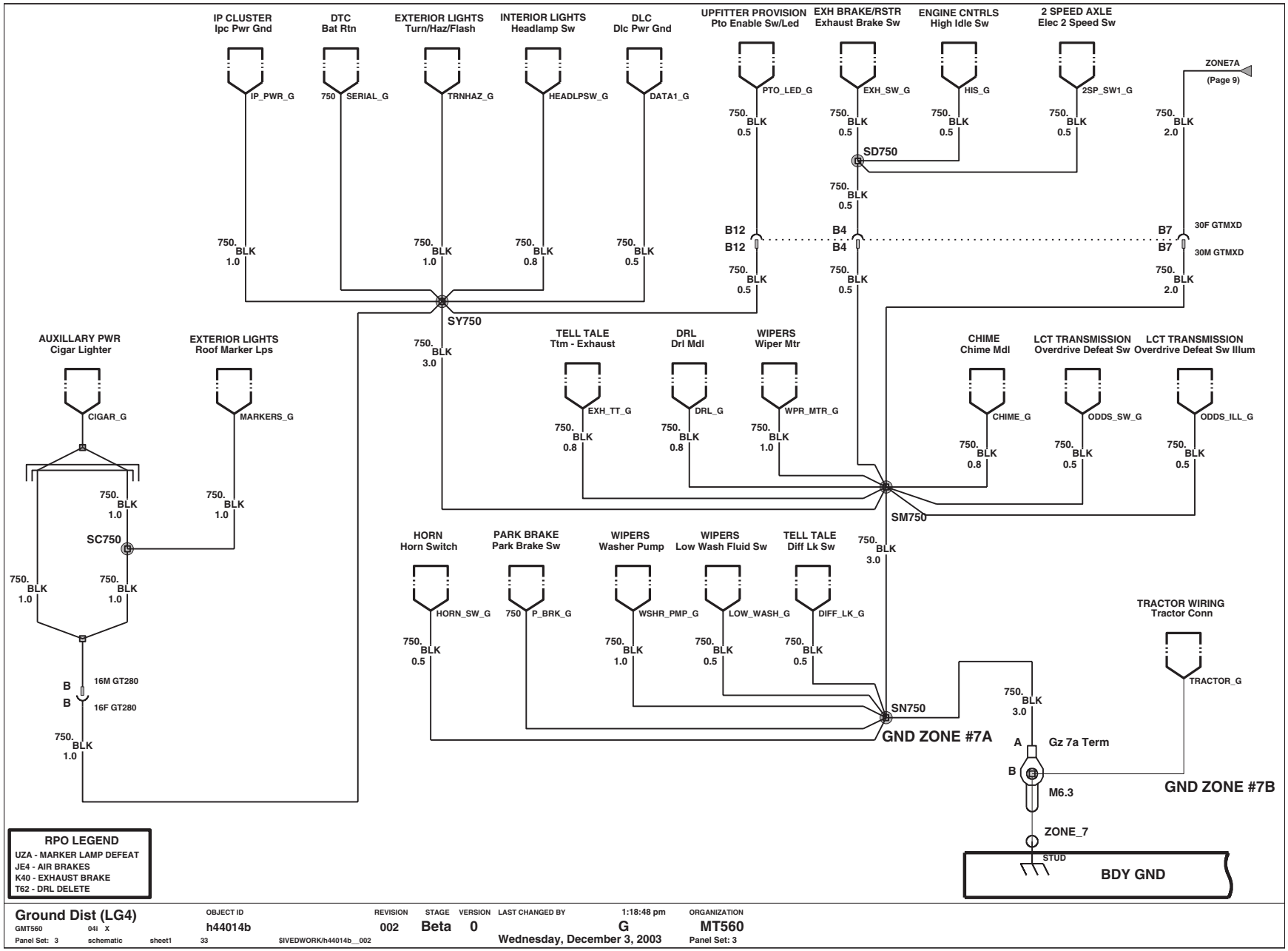


RPO LEGEND

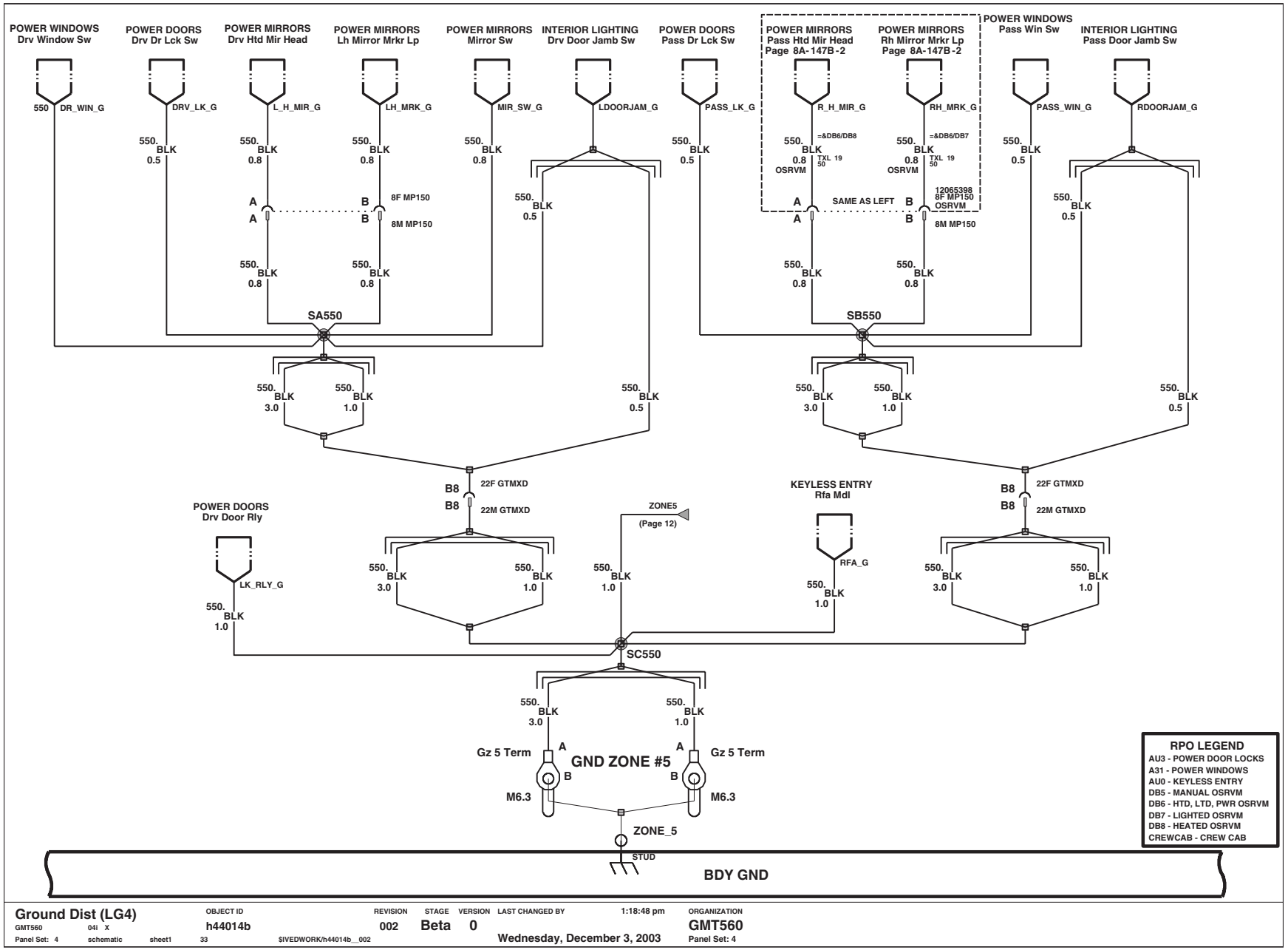
- MWF - MD AUTO TRANS
- MWW/MWX - MANUAL TRANS
- M74 - LCT 1000 AUTO TRANS
- MX4 - LCT 2000 AUTO TRANS
- MTW - LCT 2400 AUTO TRANS
- K40 - EXHAUST BRAKE
- JE4 - AIR BRAKES

Ground Dist (LG4)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
GMT560 04i X	h44014b	002	Beta	0		1:18:48 pm	GMT560
Panel Set: 2 schematic sheet1 33	$IVEDWORK/h44014b__002				Wednesday, December 3, 2003		Panel Set: 2

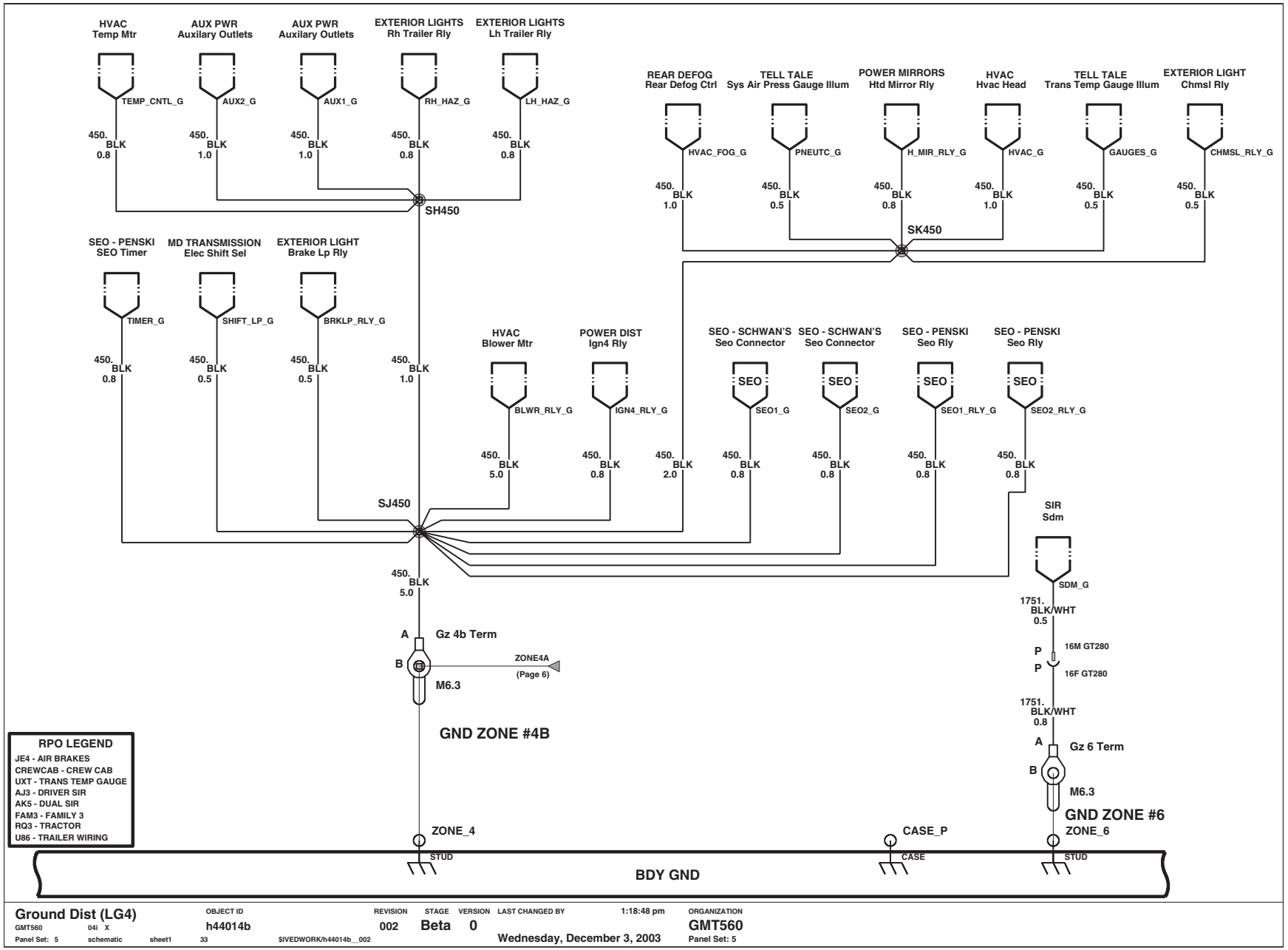
Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



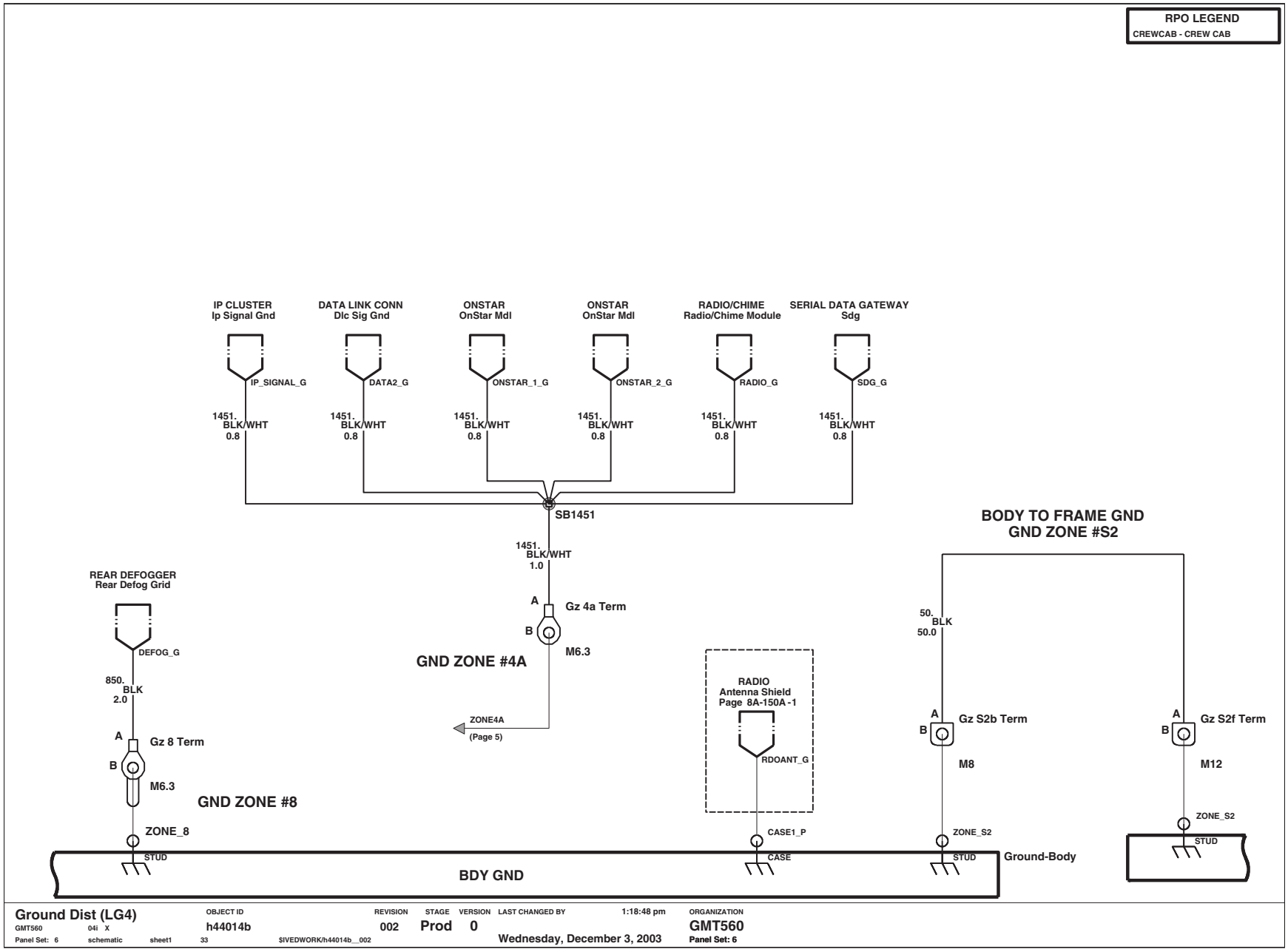
Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



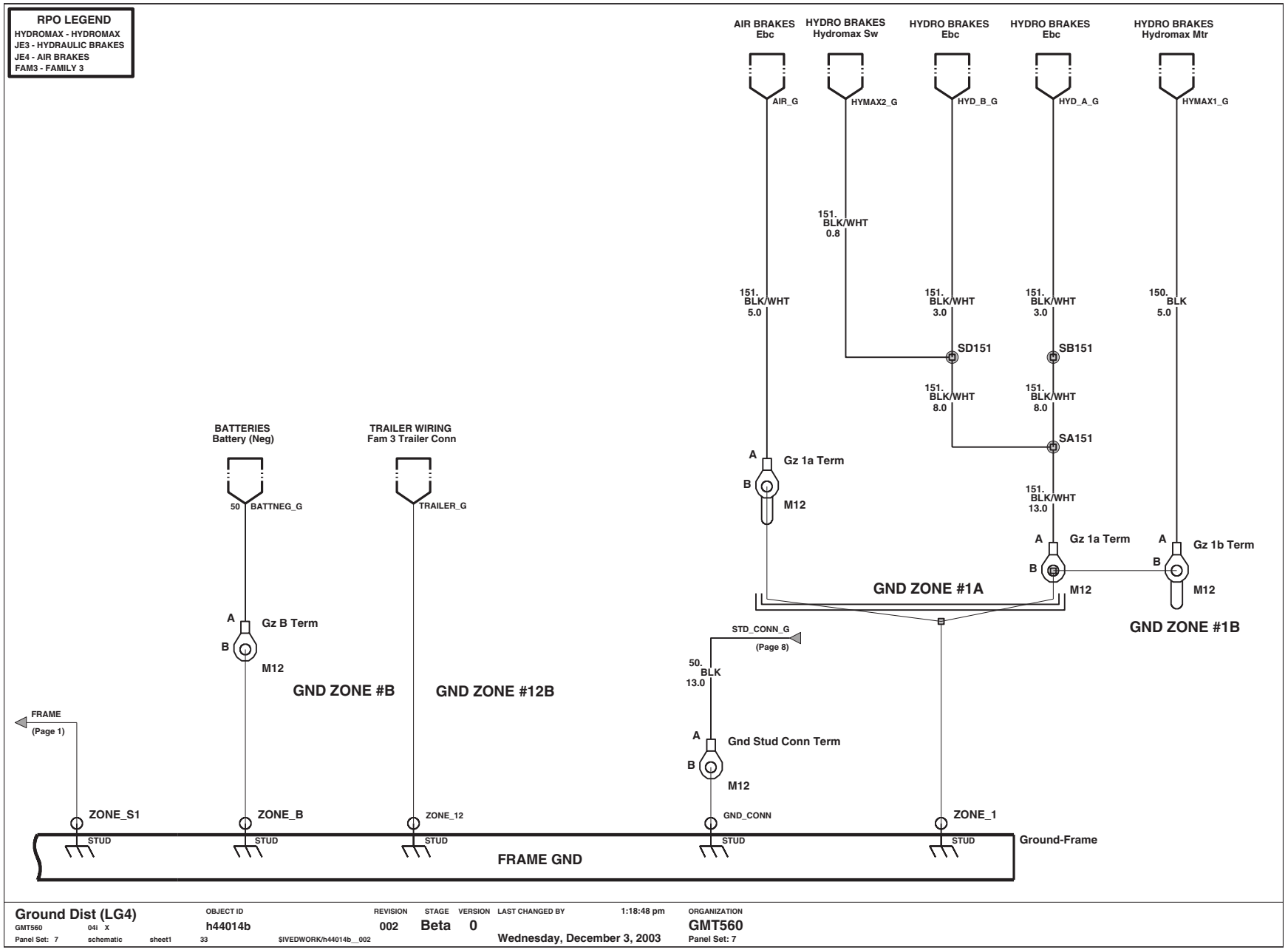
Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



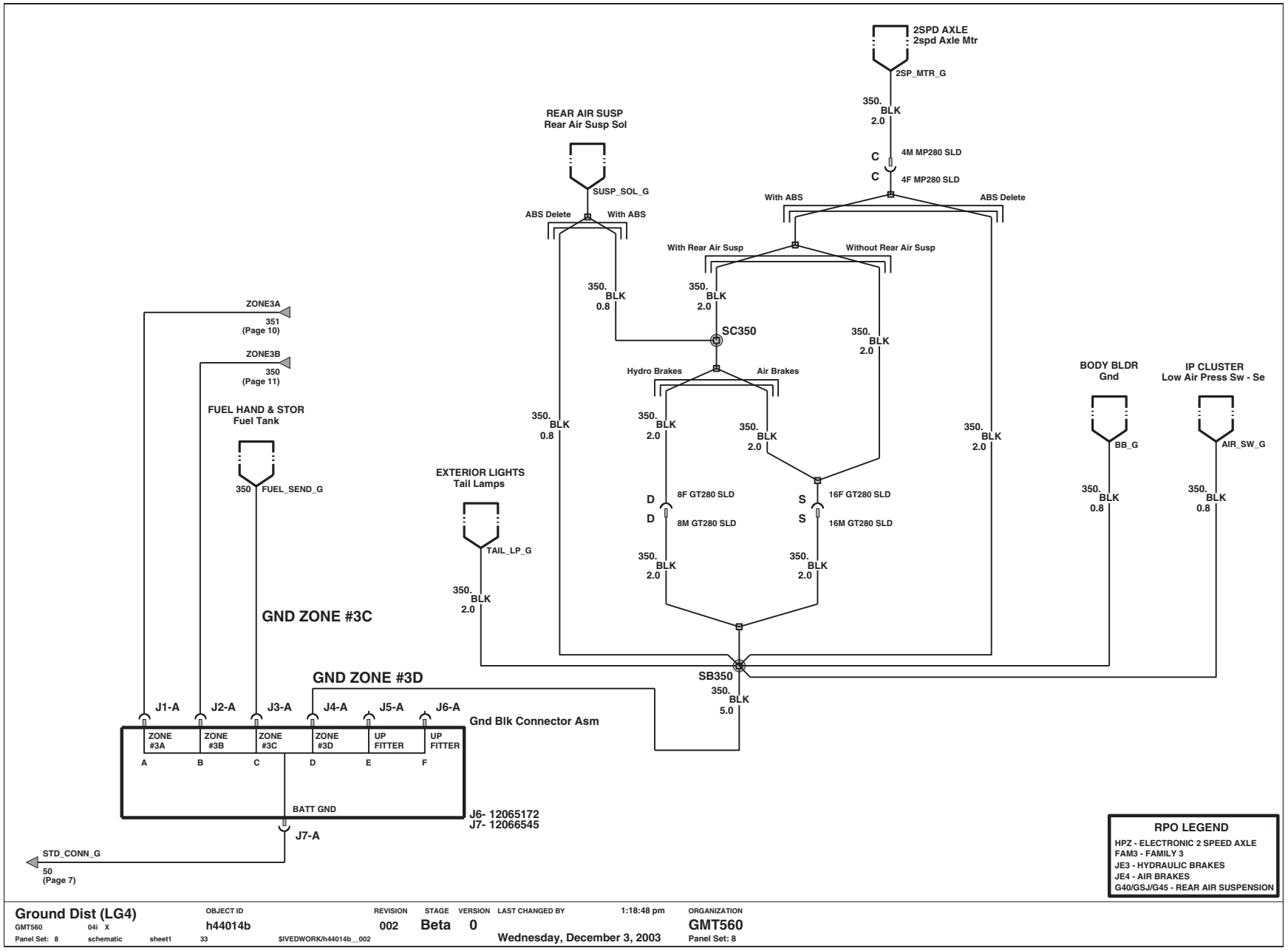
Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



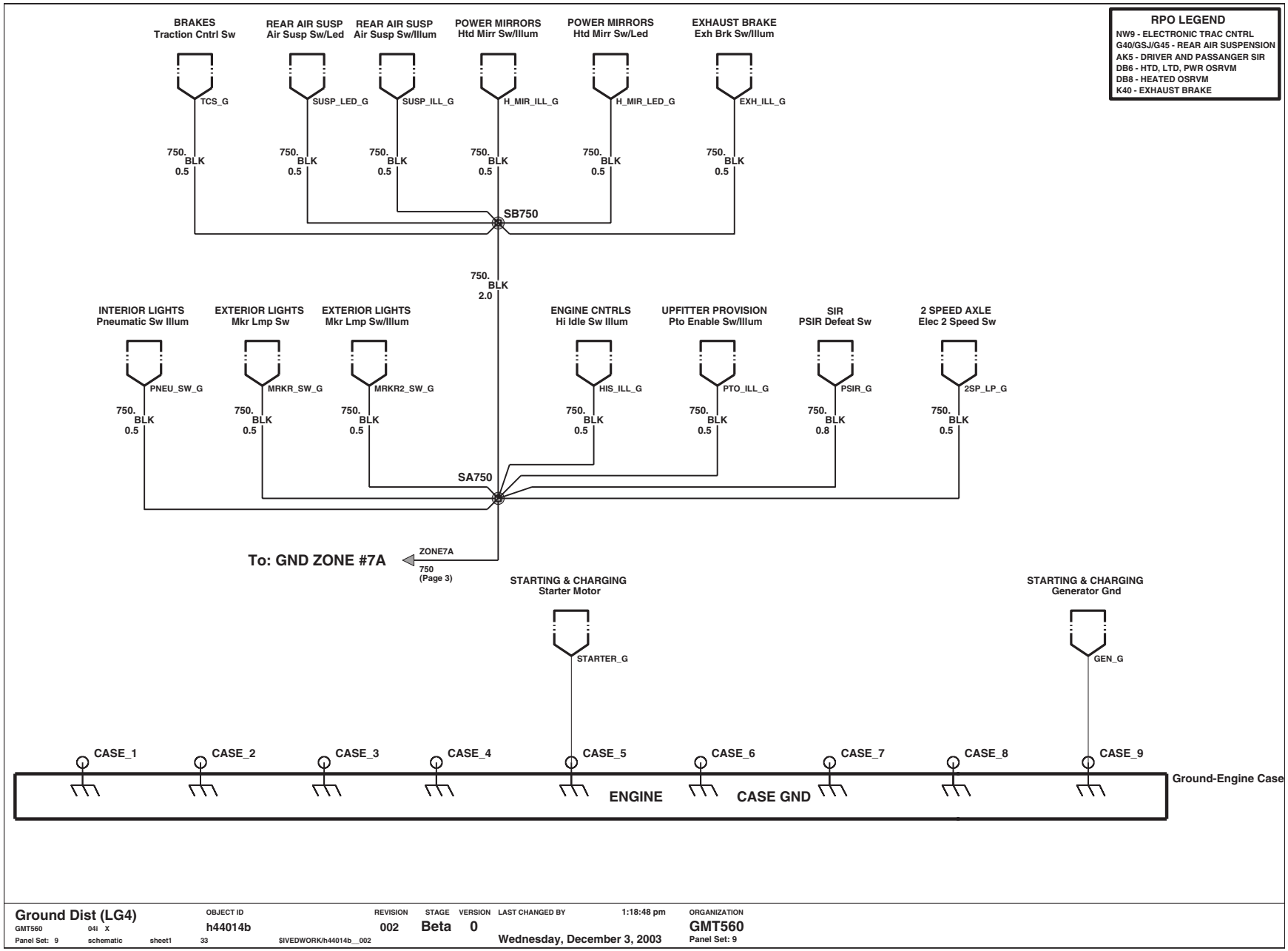
Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



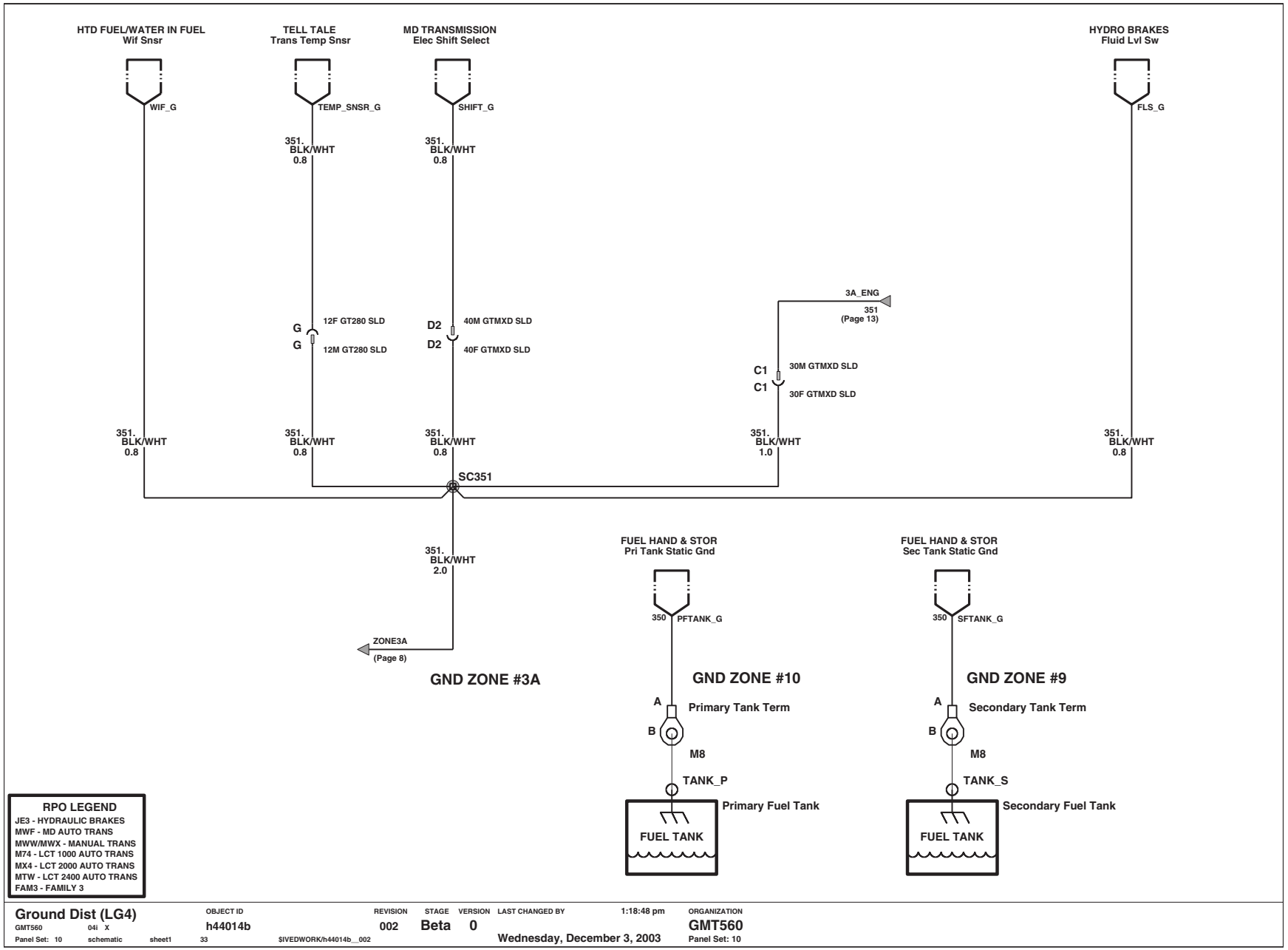
Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



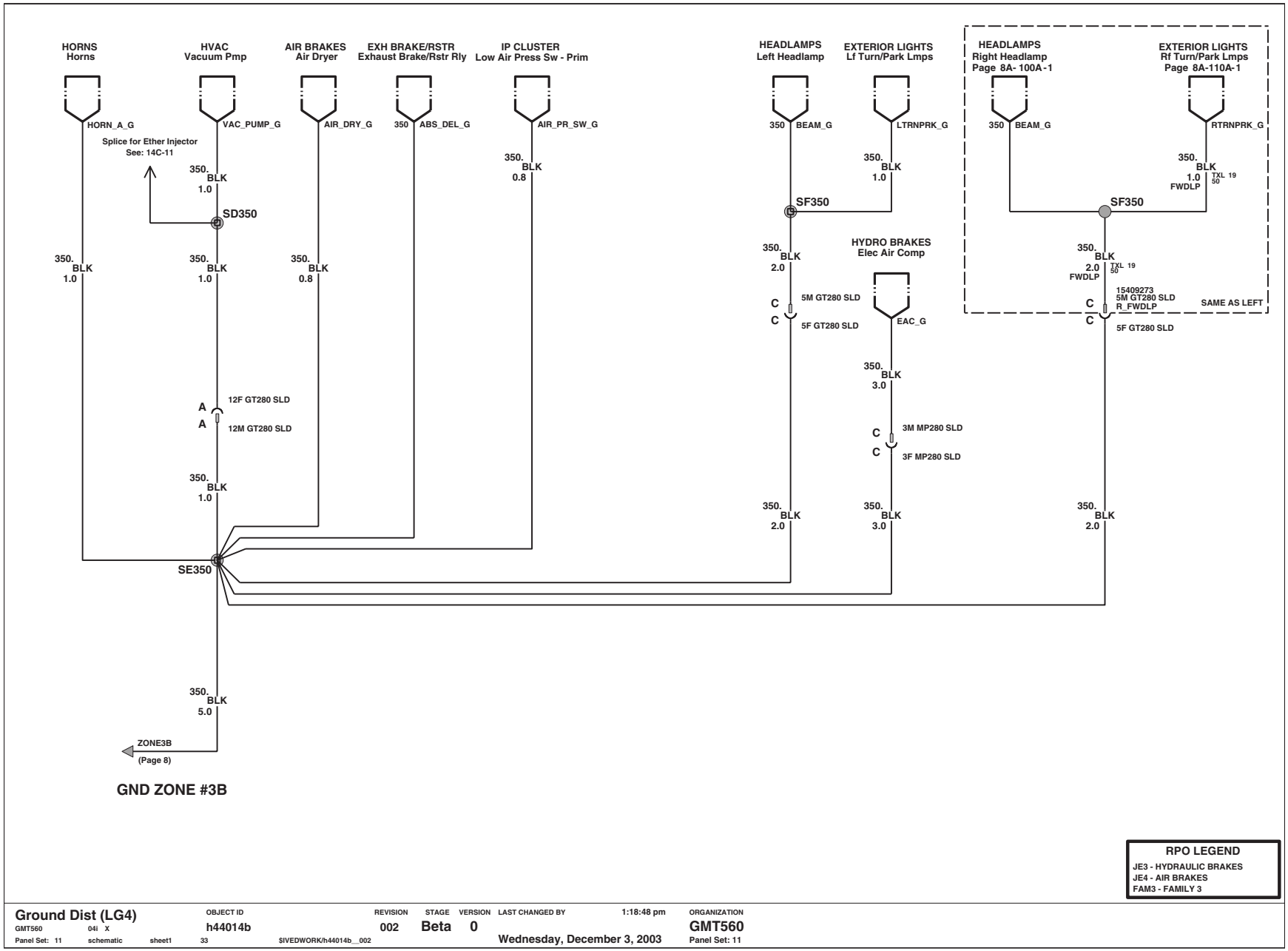
Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



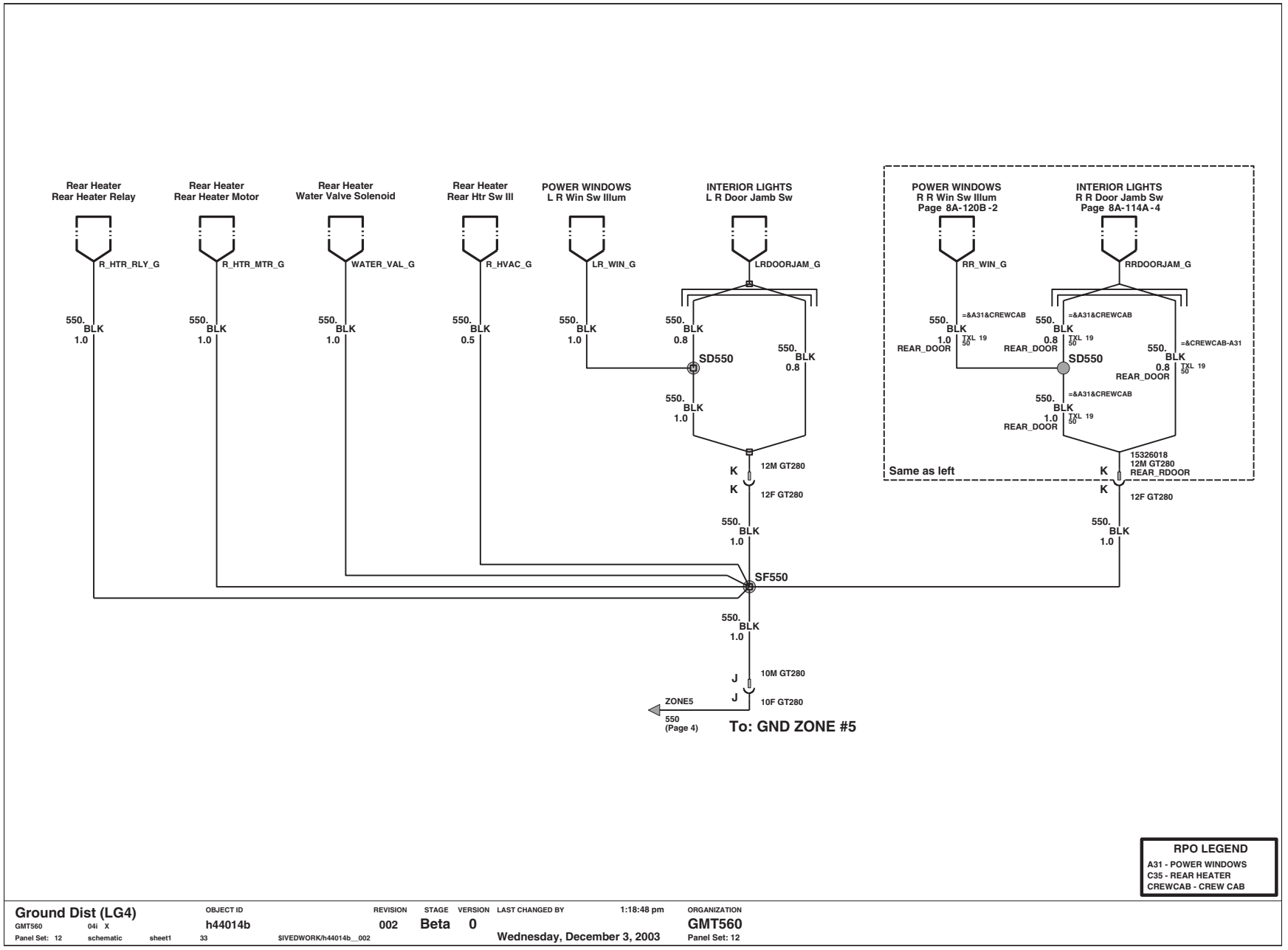
Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax



Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax

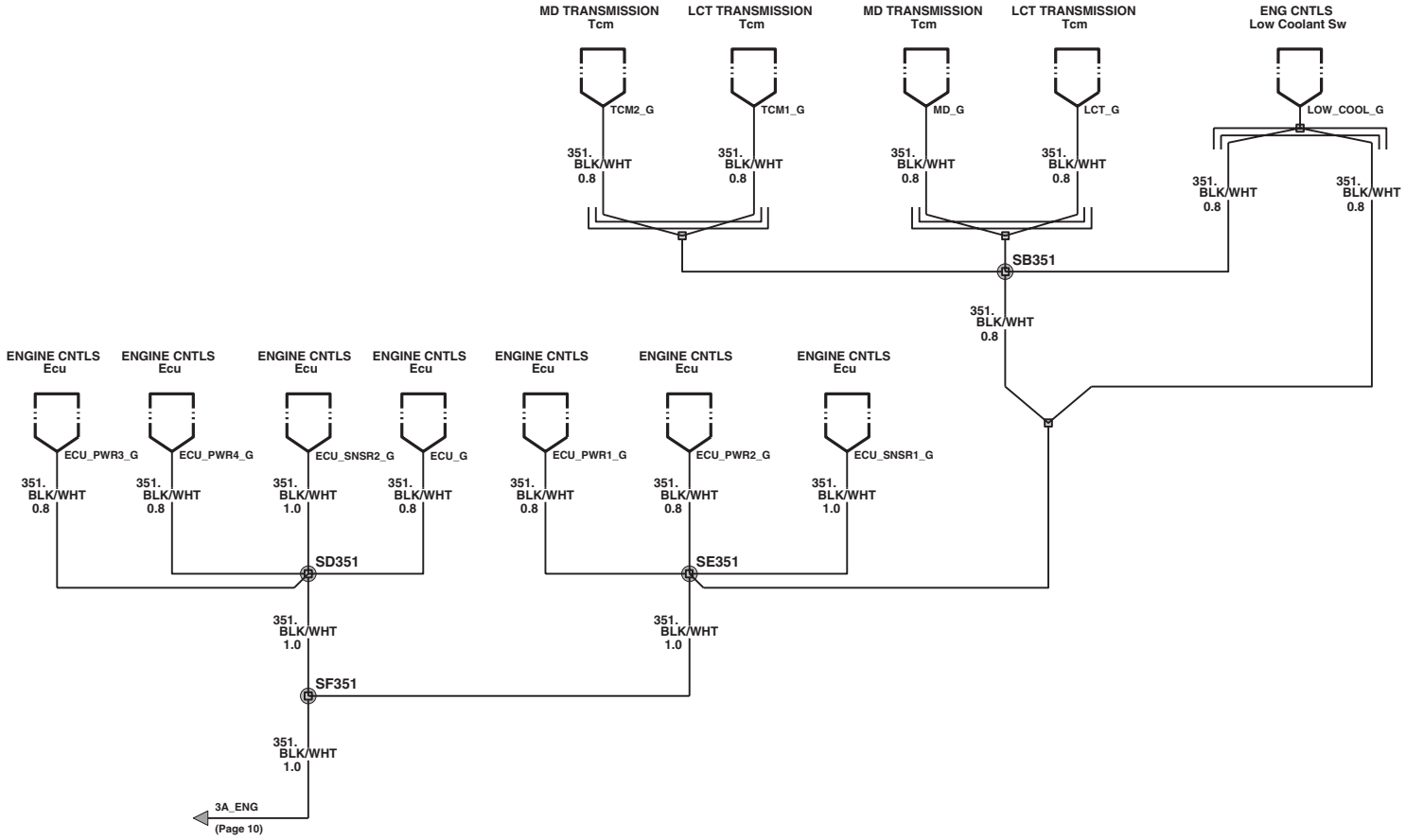


RPO LEGEND
A31 - POWER WINDOWS
C35 - REAR HEATER
CREWCAB - CREW CAB

Ground Dist (LG4)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
GMT560 04i X	h44014b	002	Beta	0		1:18:48 pm	GMT560
Panel Set: 12 schematic sheet1 33	$IVEDWORK/h44014b__002				Wednesday, December 3, 2003		Panel Set: 12

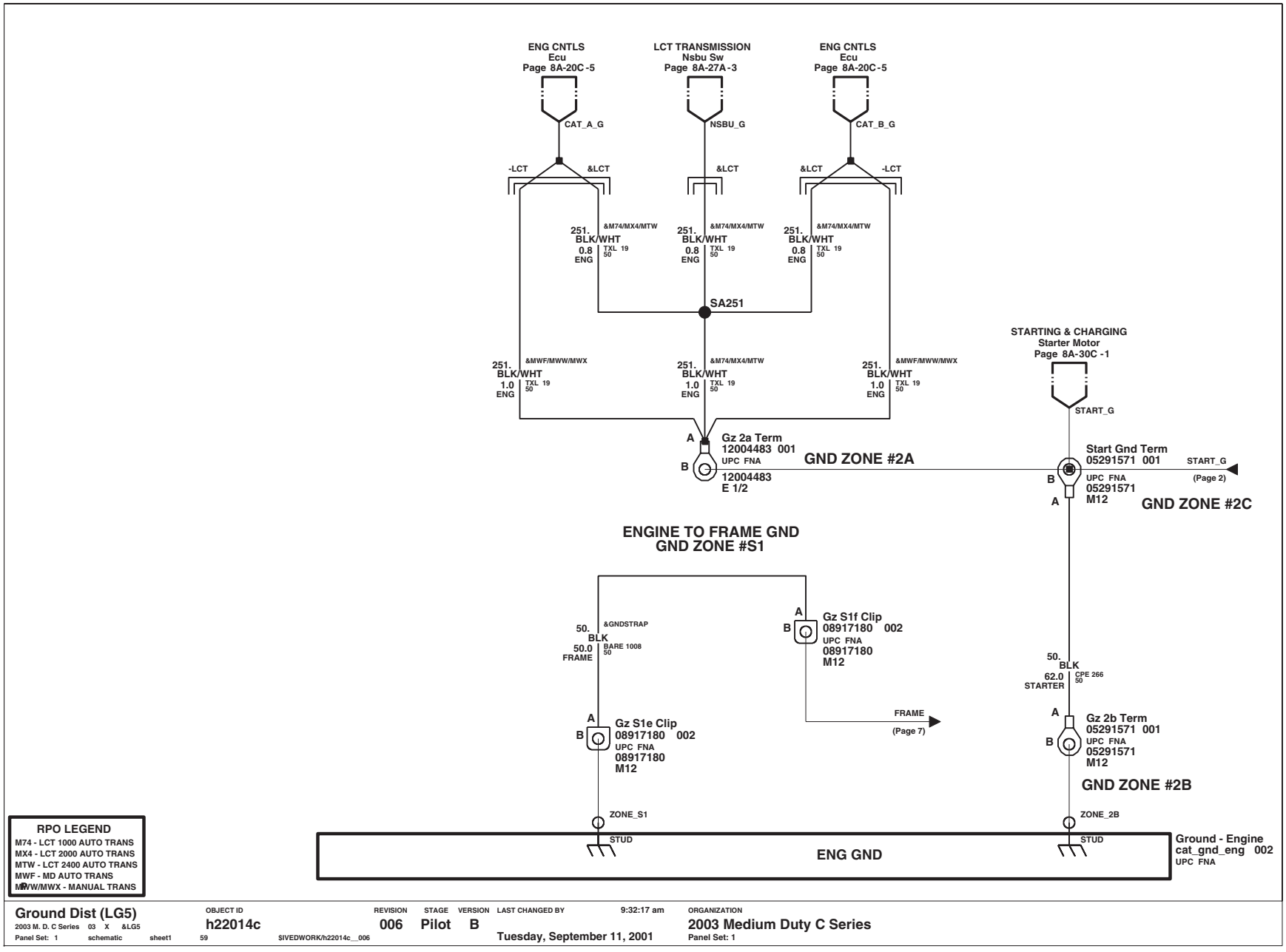
Ground Distribution — (LG4-'04i) 7.8L-Diesel/Duramax

04_560_000	TY	BETA - INITIAL CREATION	18SE01	
04_560 1115	LR	REMOVE 2SPD AIR CKT.	08OC01	
04_560 1136	JG	Pneumatic Switch Update	15NO01	
04_560 1149	JG	TRANS RPO UPDATE	13DE01	
03_560 1151	LR	REMOVE HYD_BST JMPR	14DE01	
04_560 1106	JG	Update 900 ckts	08FE02	
04_560_000	JG	Obsolete Connector Update	13FE02	
04_560 1228	JG	Delete R_ABS Harness with ABS Delete	02MY02	

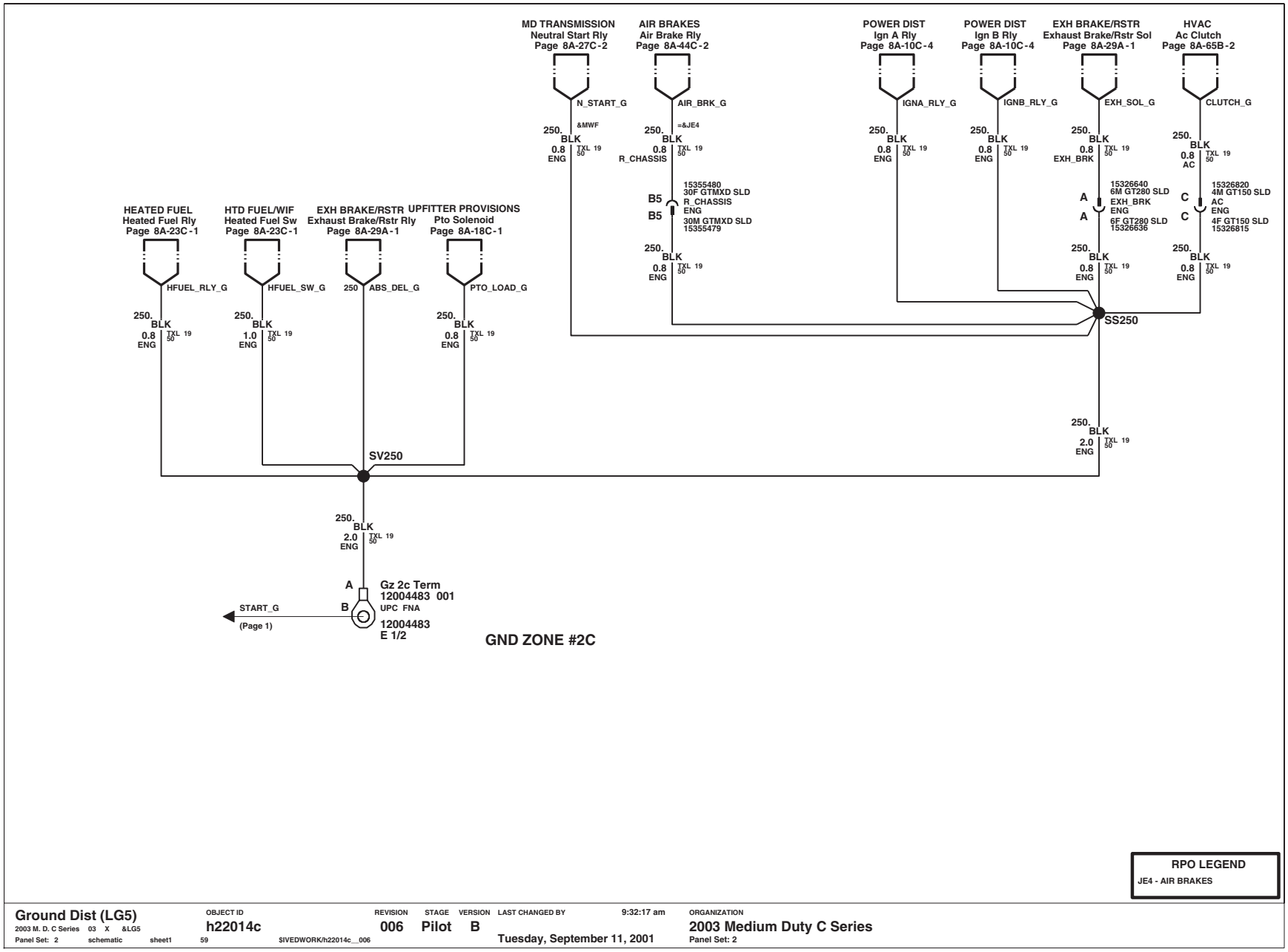


Ground Dist (LG4)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY	1:18:48 pm	ORGANIZATION
GMT560 04i X	h44014b	002	Beta	0			GMT560
Panel Set: 13 schematic sheet1 33	$IVEDWORK/h44014b__002				Wednesday, December 3, 2003		Panel Set: 13

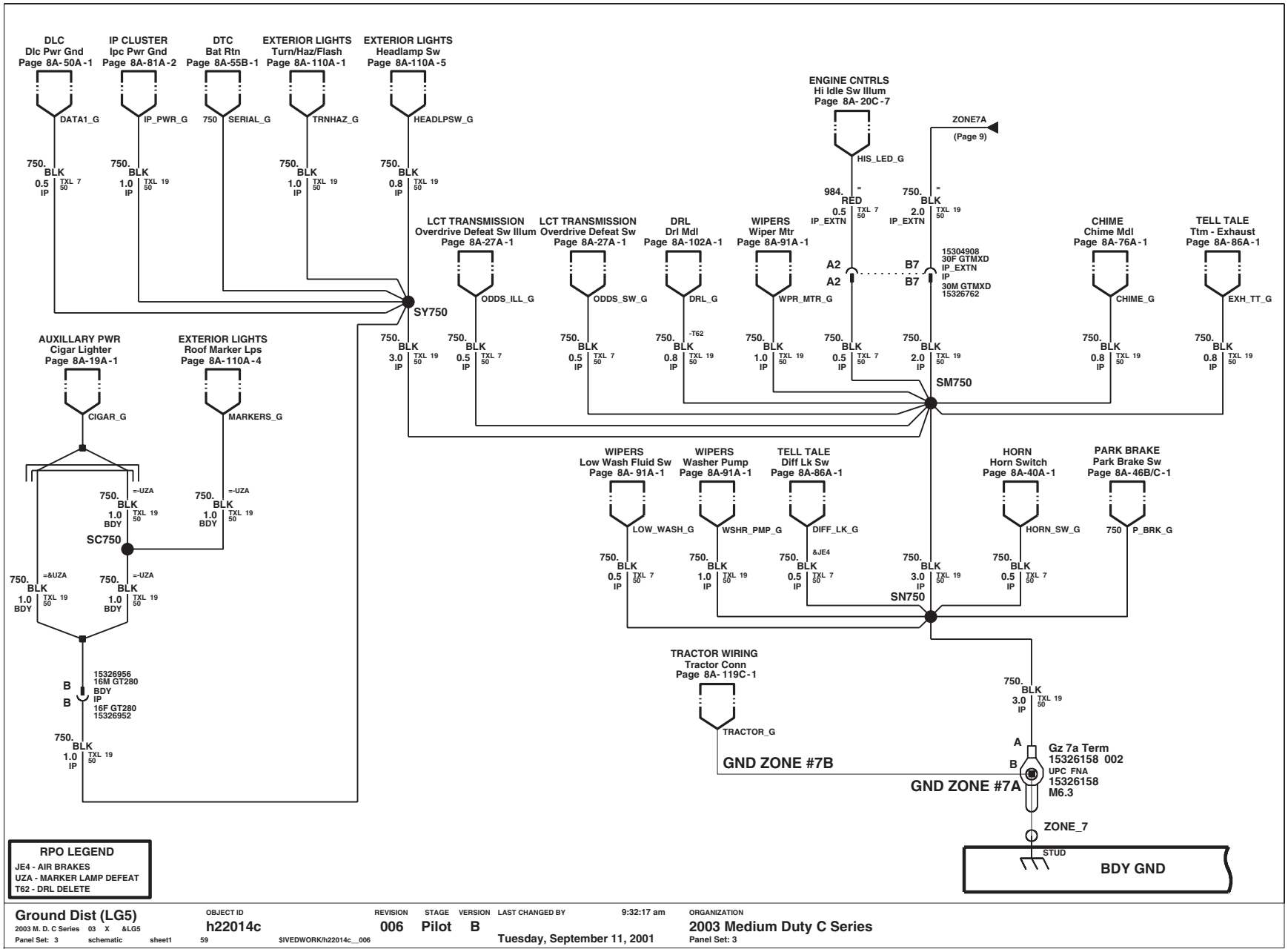
Ground Distribution — (LG5) 7.2L-Diesel/CAT



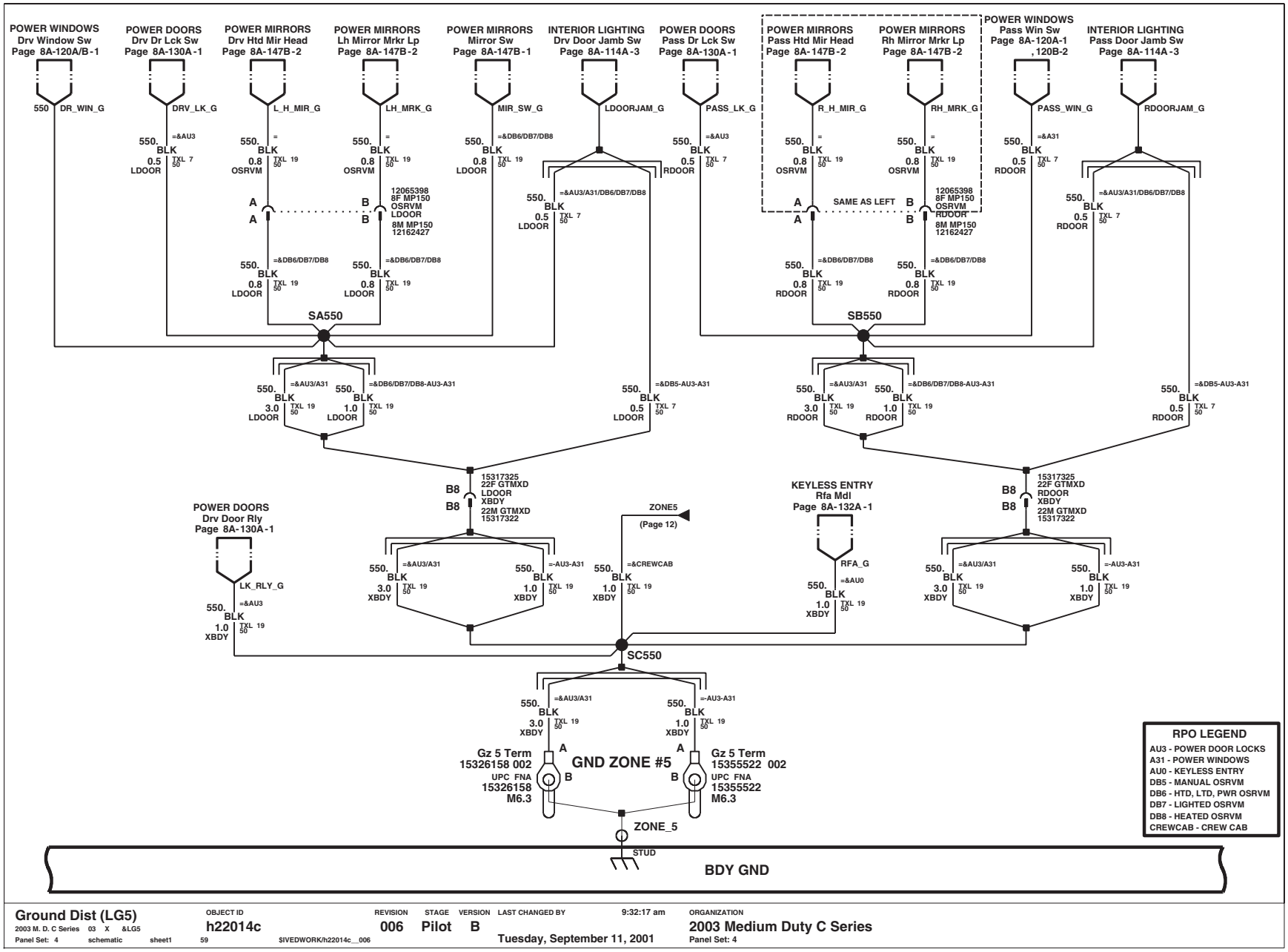
Ground Distribution — (LG5) 7.2L-Diesel/CAT



Ground Distribution — (LG5) 7.2L-Diesel/CAT



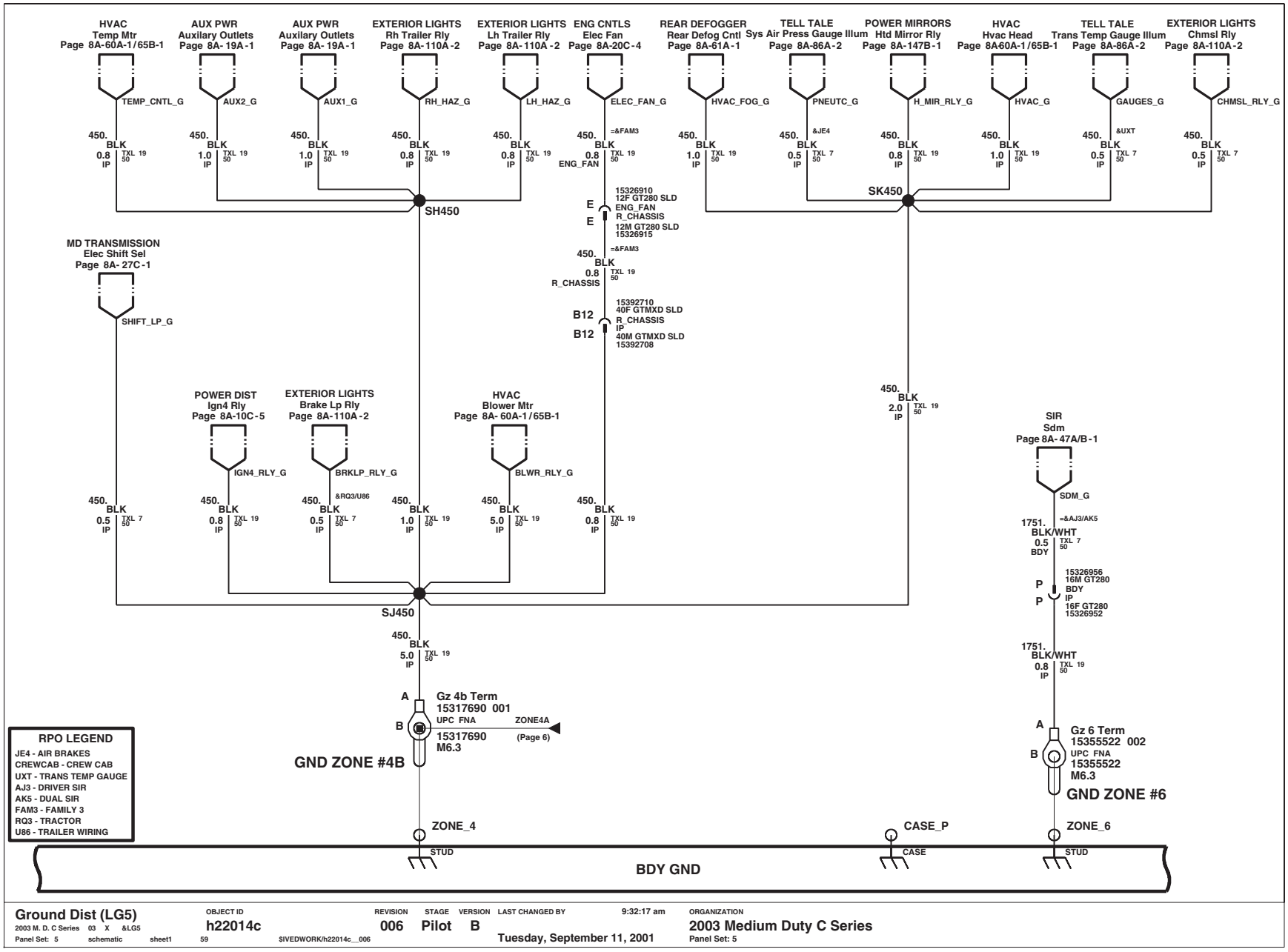
Ground Distribution — (LG5) 7.2L-Diesel/CAT



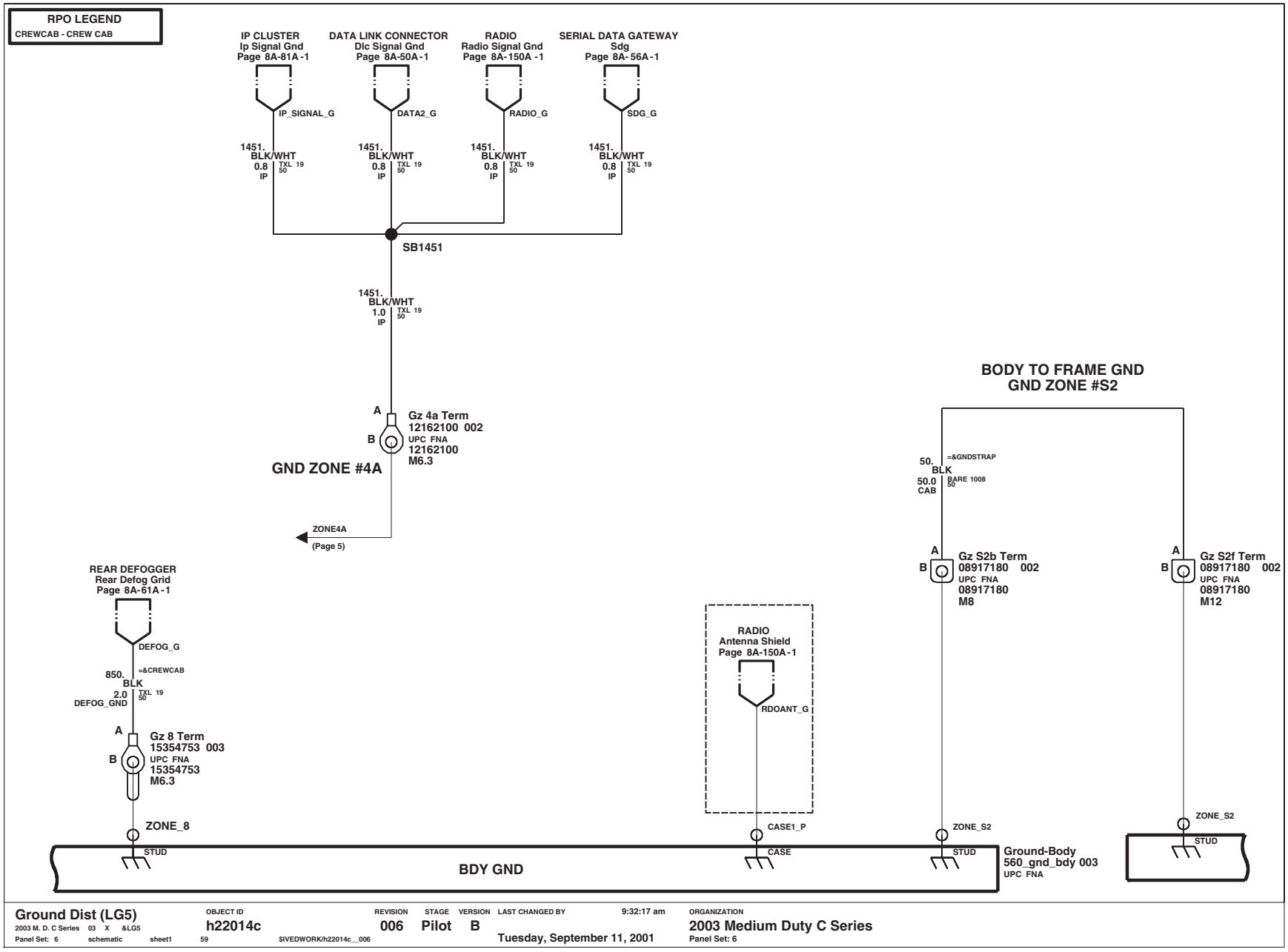
Ground Dist (LG5)
2003 M. D. C Series 03 X &LG5
Panel Set: 4 schematic sheet1 59

OBJECT ID: h22014c
REVISION: 006
STAGE: Pilot
VERSION: B
LAST CHANGED BY: $IVEDWORK/h22014c__006
9:32:17 am Tuesday, September 11, 2001
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 4

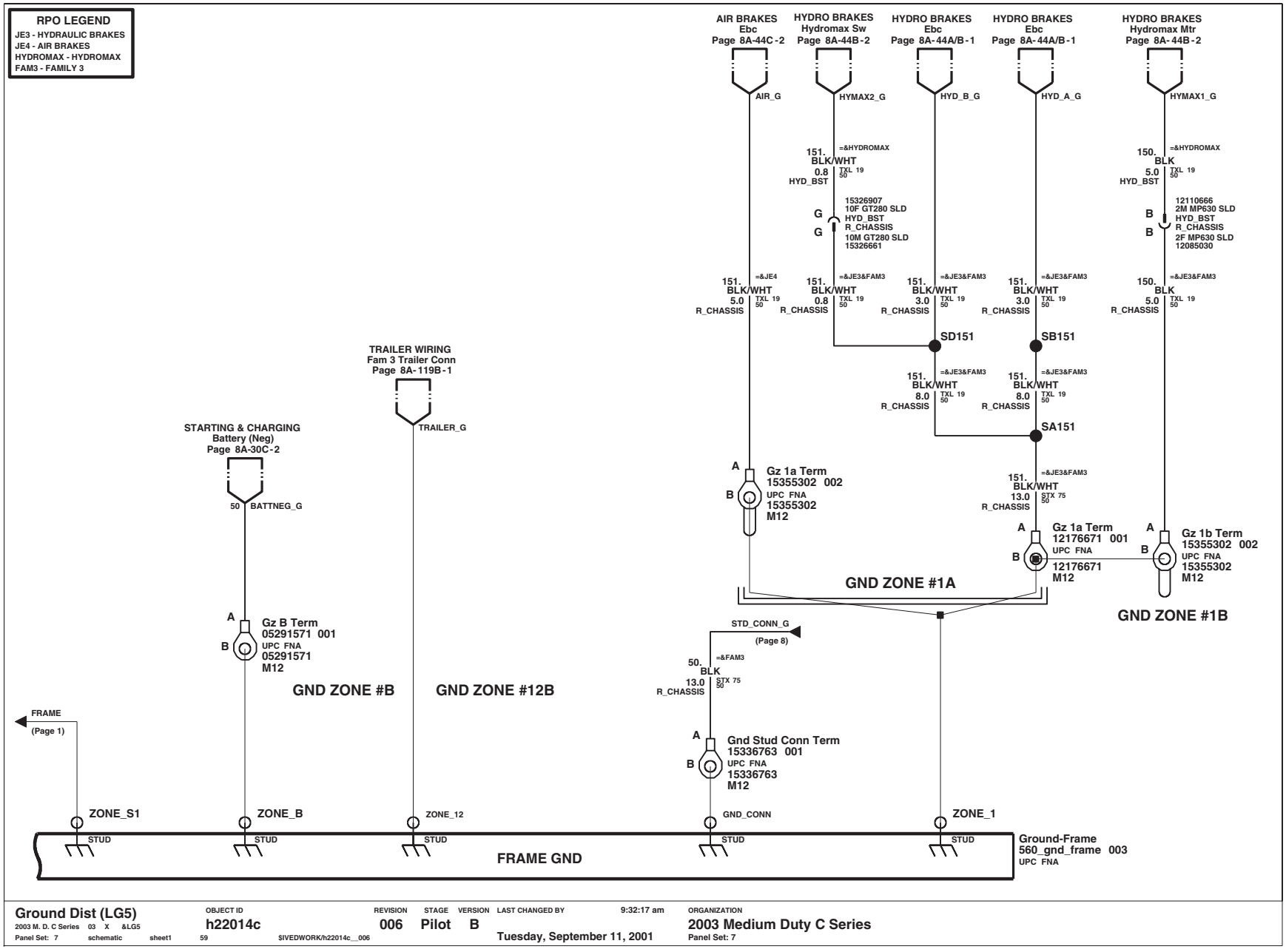
Ground Distribution — (LG5) 7.2L-Diesel/CAT



Ground Distribution — (LG5) 7.2L-Diesel/CAT



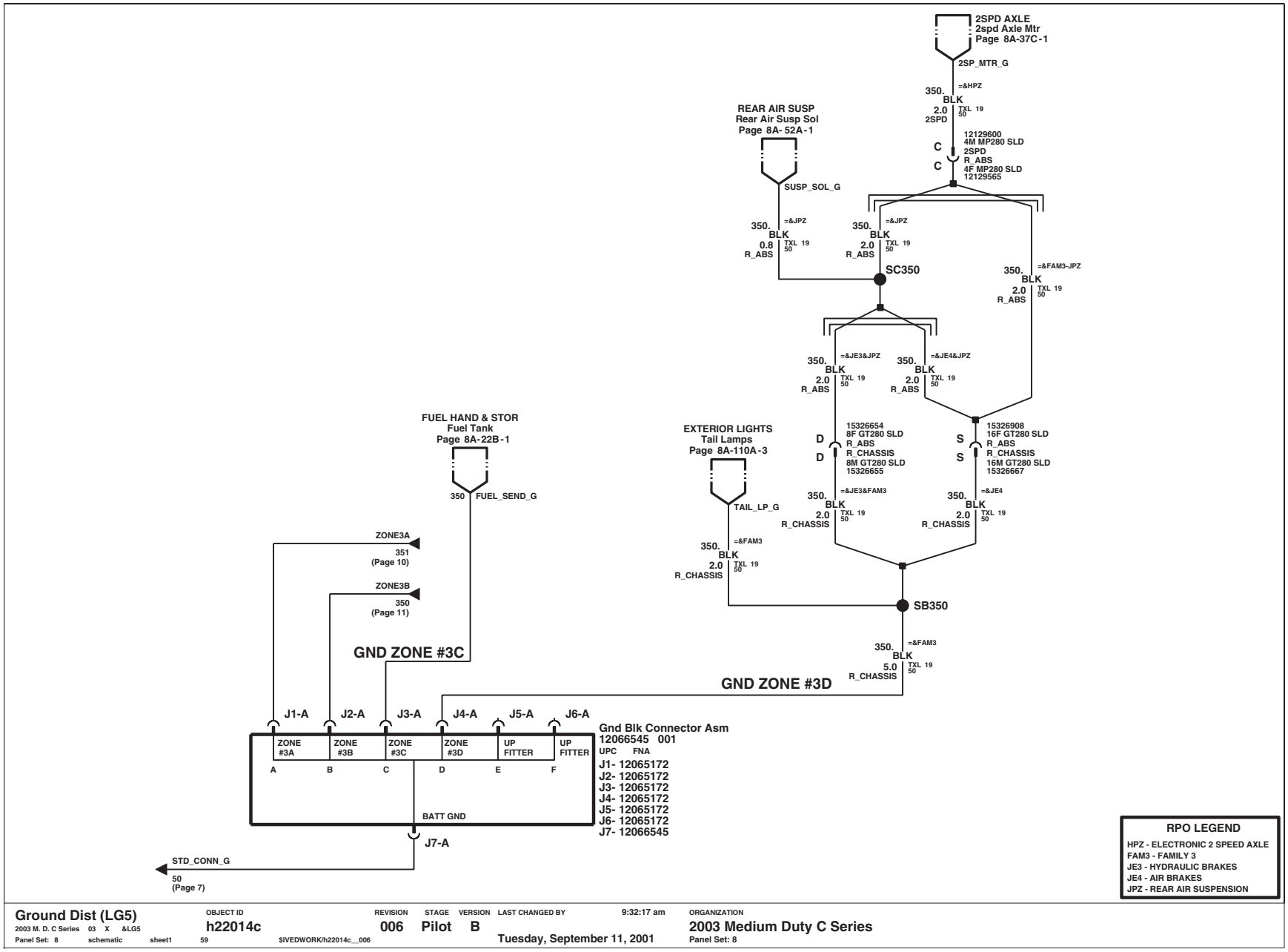
Ground Distribution — (LG5) 7.2L-Diesel/CAT



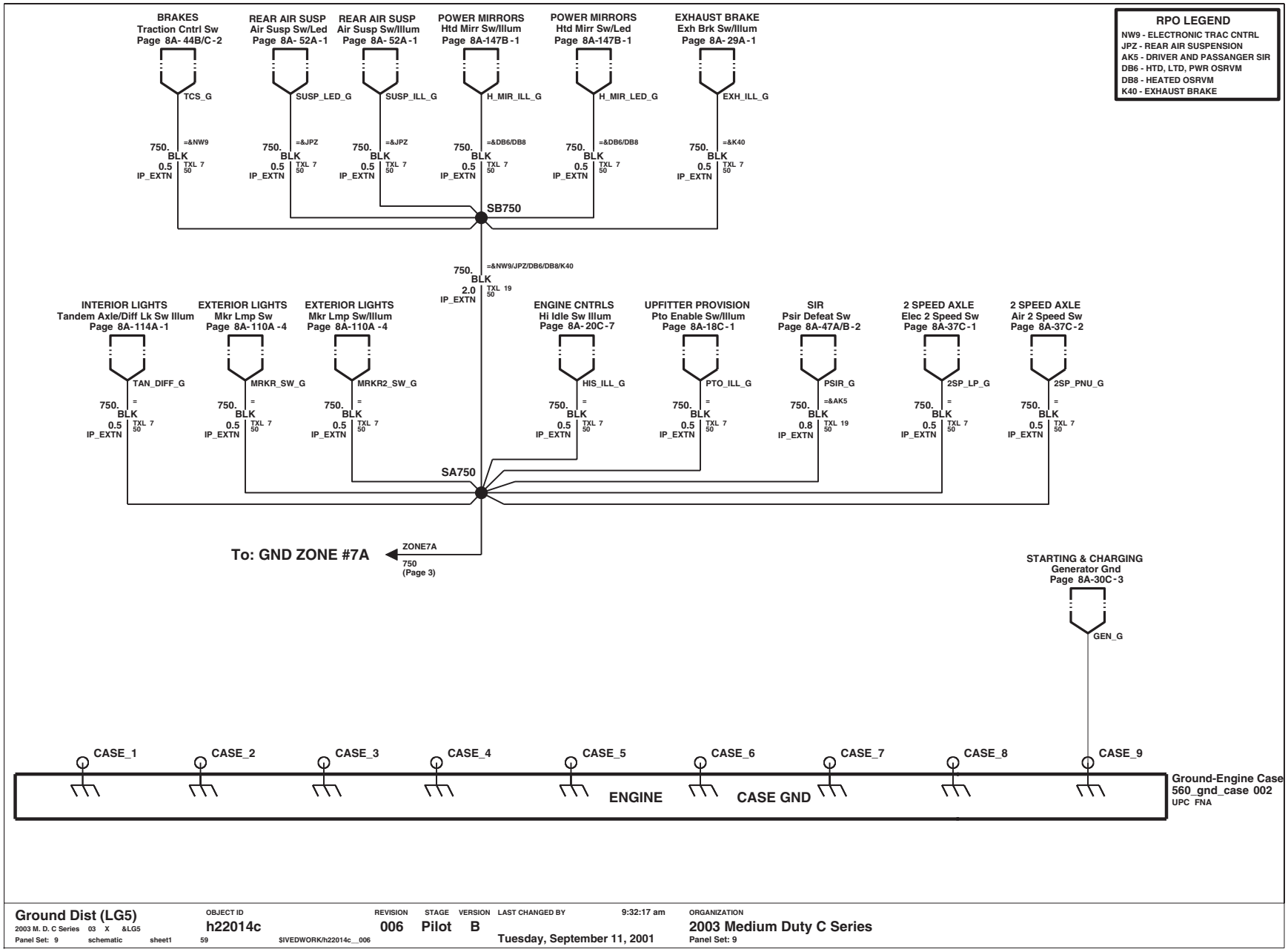
Ground Dist (LG5) | OBJECT ID h22014c | REVISION 006 | STAGE Pilot | VERSION B | LAST CHANGED BY | 9:32:17 am | Tuesday, September 11, 2001 | ORGANIZATION 2003 Medium Duty C Series | Panel Set: 7

2003 M. D. C Series 03 X &LG5 | Panel Set: 7 schematic sheet1 59 $IVEDWORK/h22014c__006

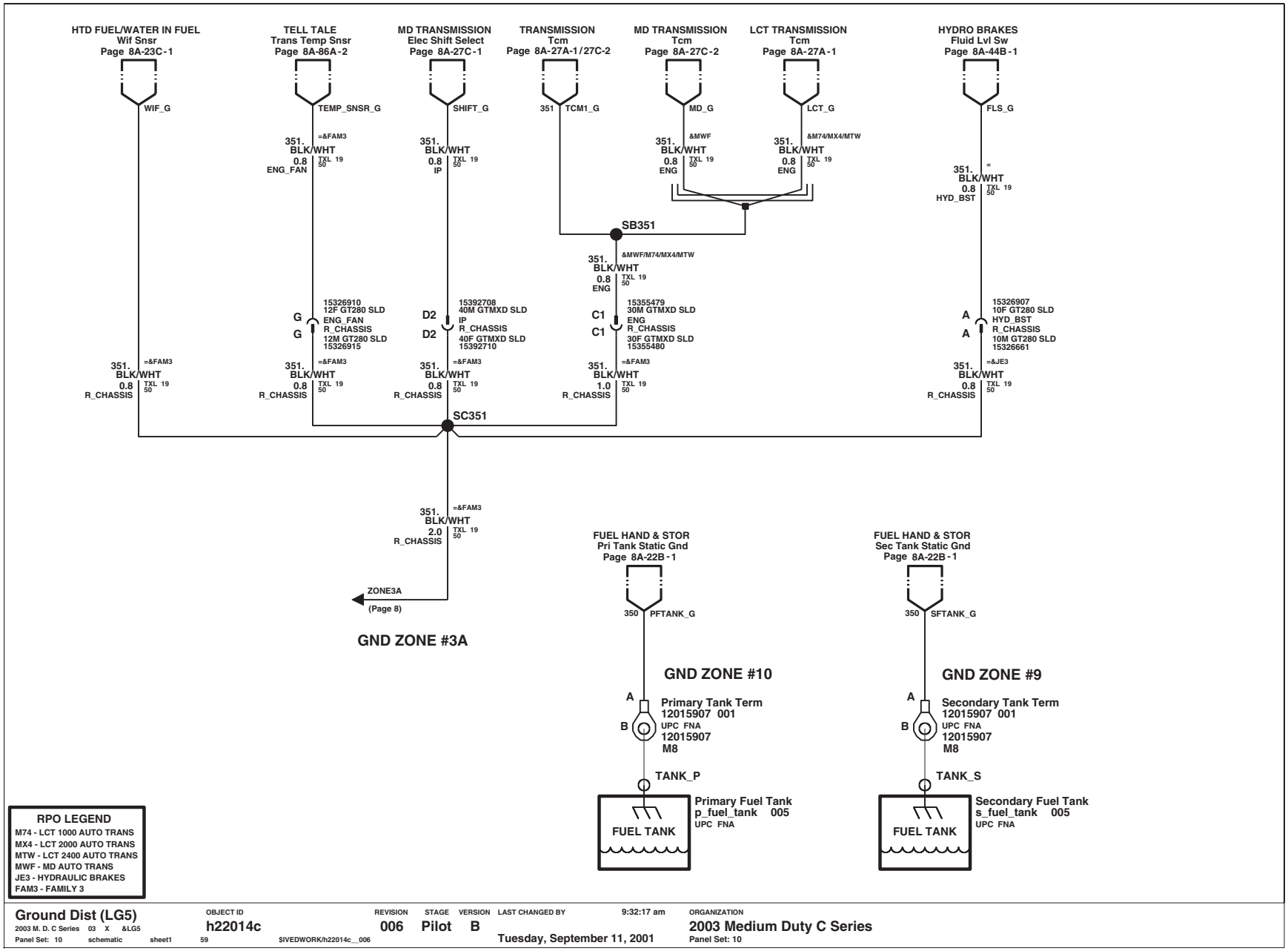
Ground Distribution — (LG5) 7.2L-Diesel/CAT



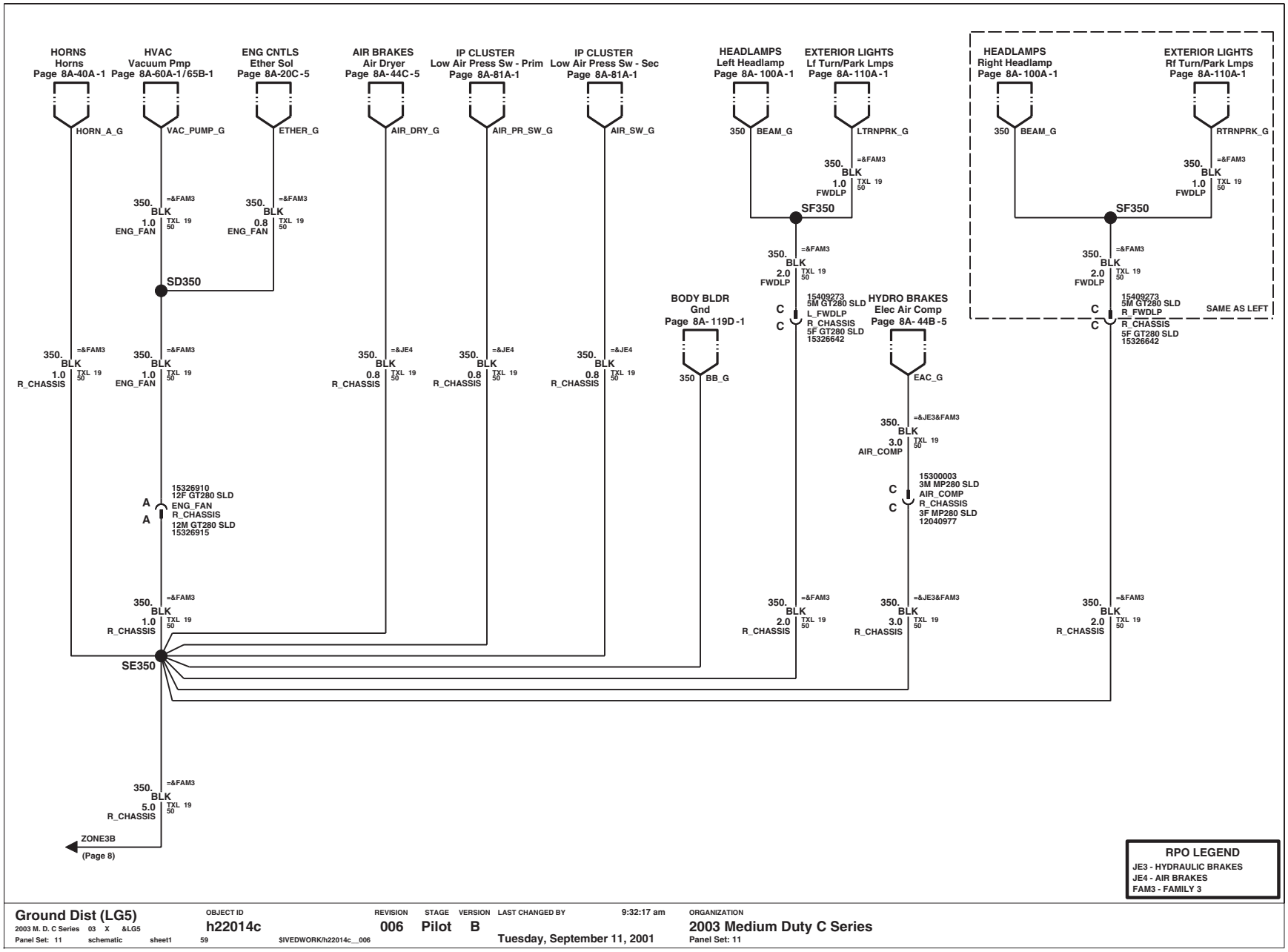
Ground Distribution — (LG5) 7.2L-Diesel/CAT



Ground Distribution — (LG5) 7.2L-Diesel/CAT



Ground Distribution — (LG5) 7.2L-Diesel/CAT

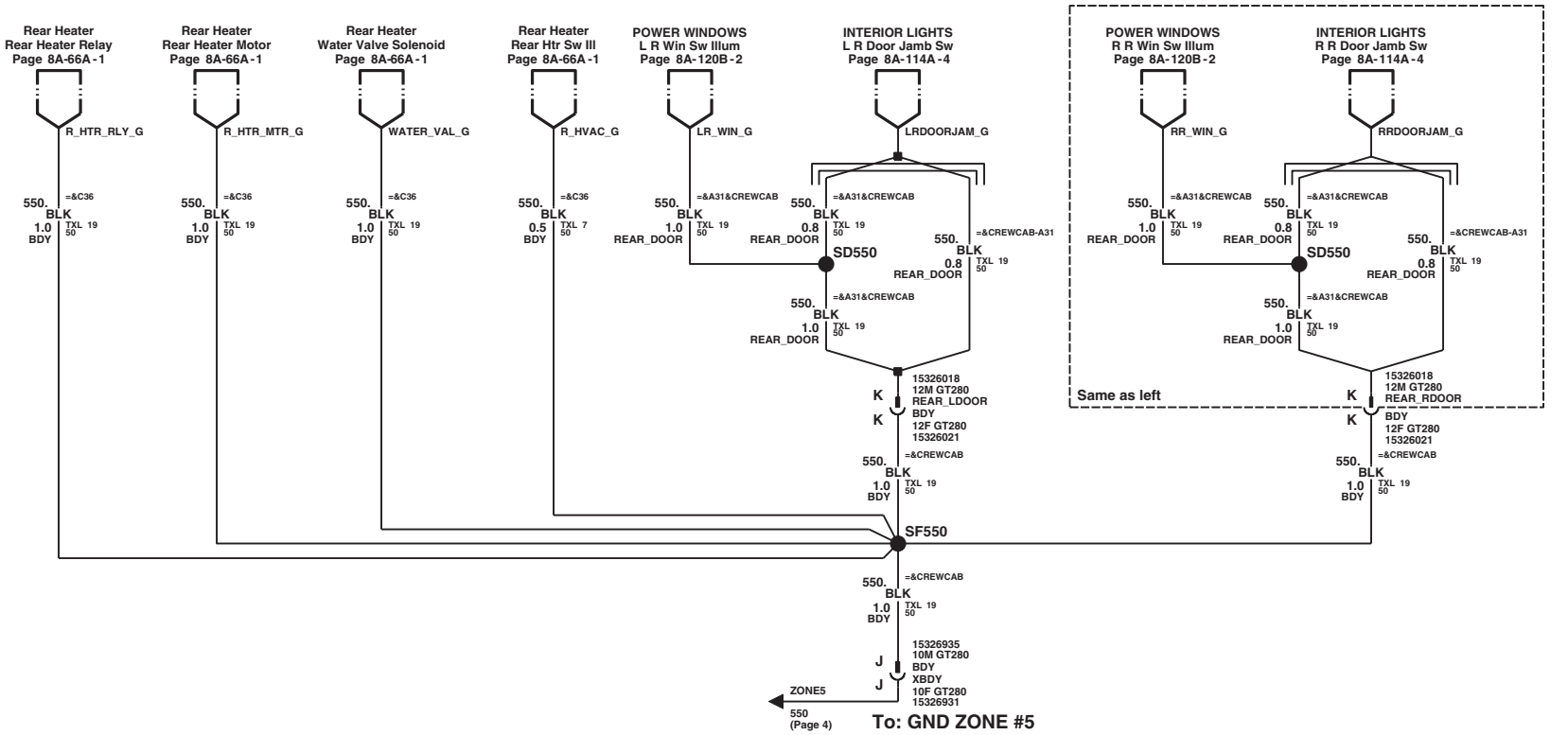


Ground Dist (LG5) | OBJECT ID h22014c | REVISION 006 | STAGE Pilot | VERSION B | LAST CHANGED BY | 9:32:17 am Tuesday, September 11, 2001 | ORGANIZATION 2003 Medium Duty C Series

2003 M. D. C Series 03 X &LG5 | Panel Set: 11 | schematic | sheet1 | 59 | $IVEDWORK/h22014c__006 | Panel Set: 11

Ground Distribution — (LG5) 7.2L-Diesel/CAT

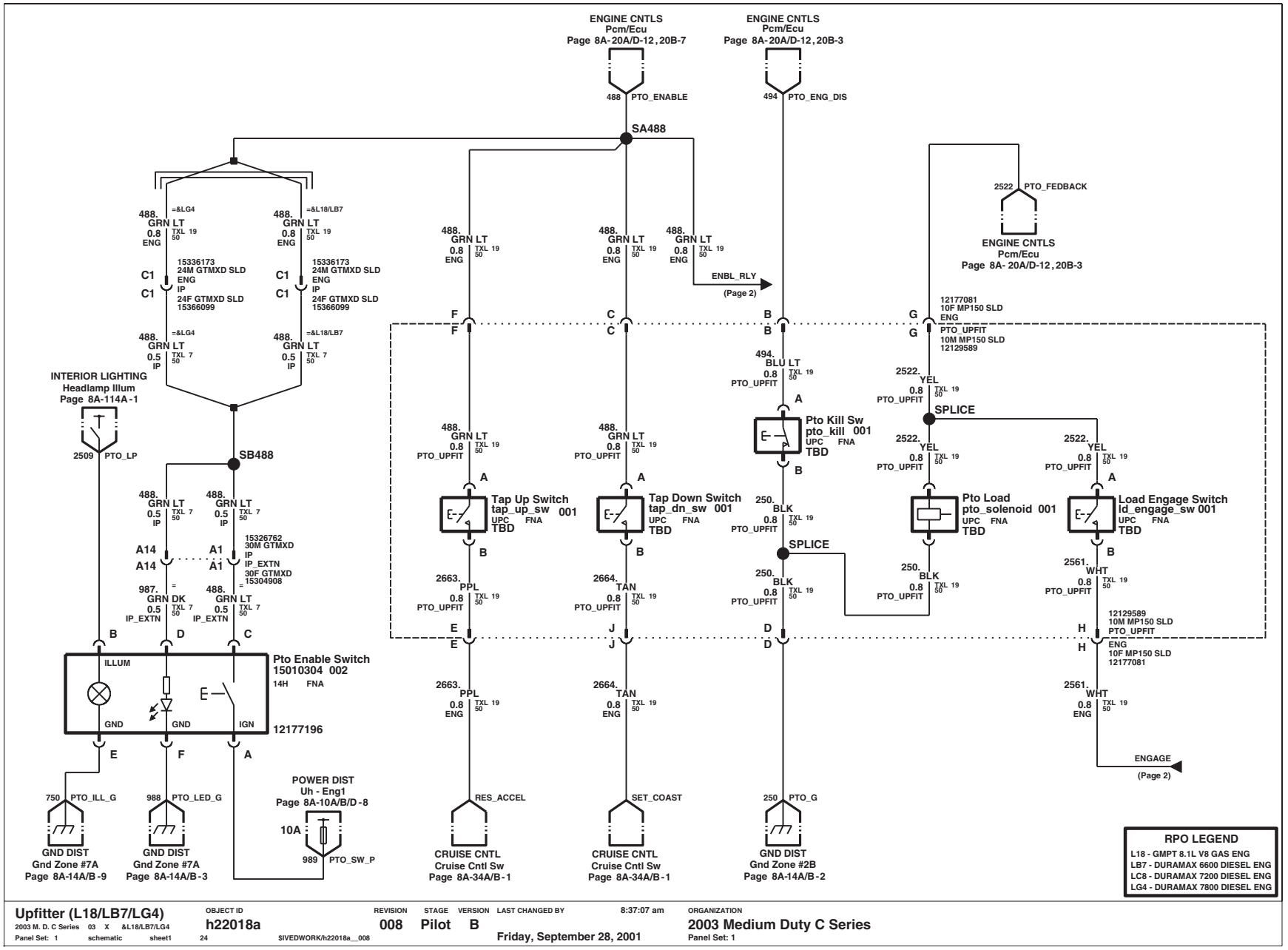
03 560 000	TY	PILOT B - INITIAL CREATION	10OC00	001
03 560 799	LR	Revised Heated Fuel and Water In Fuel	10OC00	001
03 560 805	JG	Misc. Updates	30OC00	001
03 560 814	JG	R_ABS to R_CHASSIS inline update	02NO00	001
03 560 818	JG	Various Grounding Updates	28NO00	001
03 560 839	JG	Gz 6 Updates (Ring Term & Gauge)	19DE00	001
03 560 873	JG	Remove V04, Gauge & Connector Update	06FE01	001
03 560 959	JG	Starter Ground Update	28MR01	001
03 560 1012	JG	Ground Zone 2A Ring Terminal Update	26AP01	001
03 560 1058	JG	Ground Block Ring Terminal Update	20JL01	001
03 560 1062	JG	Update Ether Injector Ground	25JL01	001
03 560 1096	JG	Ground Zone #5 Ring Term Update	11SE01	001



RPO LEGEND
A31 - POWER WINDOWS
C35 - REAR HEATER
CREWCAB - CREW CAB

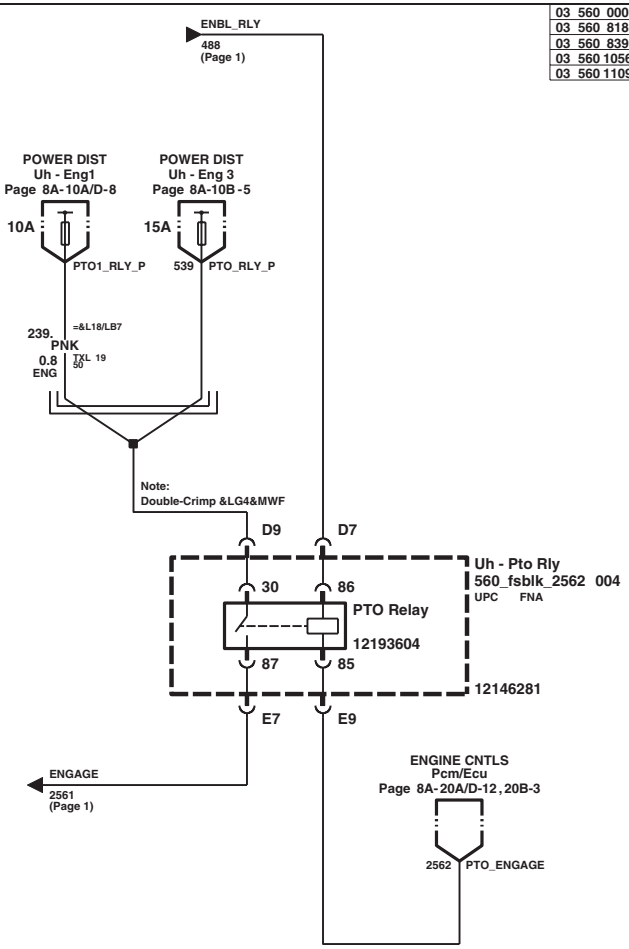
Ground Dist (LG5)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY	9:32:17 am	ORGANIZATION	
2003 M. D. C Series 03 X &LG5	h22014c	006	Pilot	B			2003 Medium Duty C Series	
Panel Set: 12 schematic sheet1 59	$IVEDWORK/h22014c__006				Tuesday, September 11, 2001		Panel Set: 12	

Upfitter Provision-'04i — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax — (LG4) 7.8L-Diesel/Duramax



Upfitter Provision-'04i — (L18) 8.1L-Gas/NAPT — (LB7) 6.6L-Diesel/Duramax — (LG4) 7.8L-Diesel/Duramax

03 560 000	TY	PILOT B - INITIAL CREATION	27NO00	001
03 560 818	JG	REPLACED CBs WITH MINI-FUSES.	27NO00	001
03 560 839	JG	Inline Update	21DE00	001
03 560 1056	LR	REMOVE LC8	18JL01	001
03 560 1109	JG	Double-Crimp Update	28SE01	001



RPO LEGEND

L18 - GMPT 8.1L V8 GAS ENG
LB7 - DURAMAX 6600 DIESEL ENG
LC8 - DURAMAX 7200 DIESEL ENG
LG4 - DURAMAX 7800 DIESEL ENG

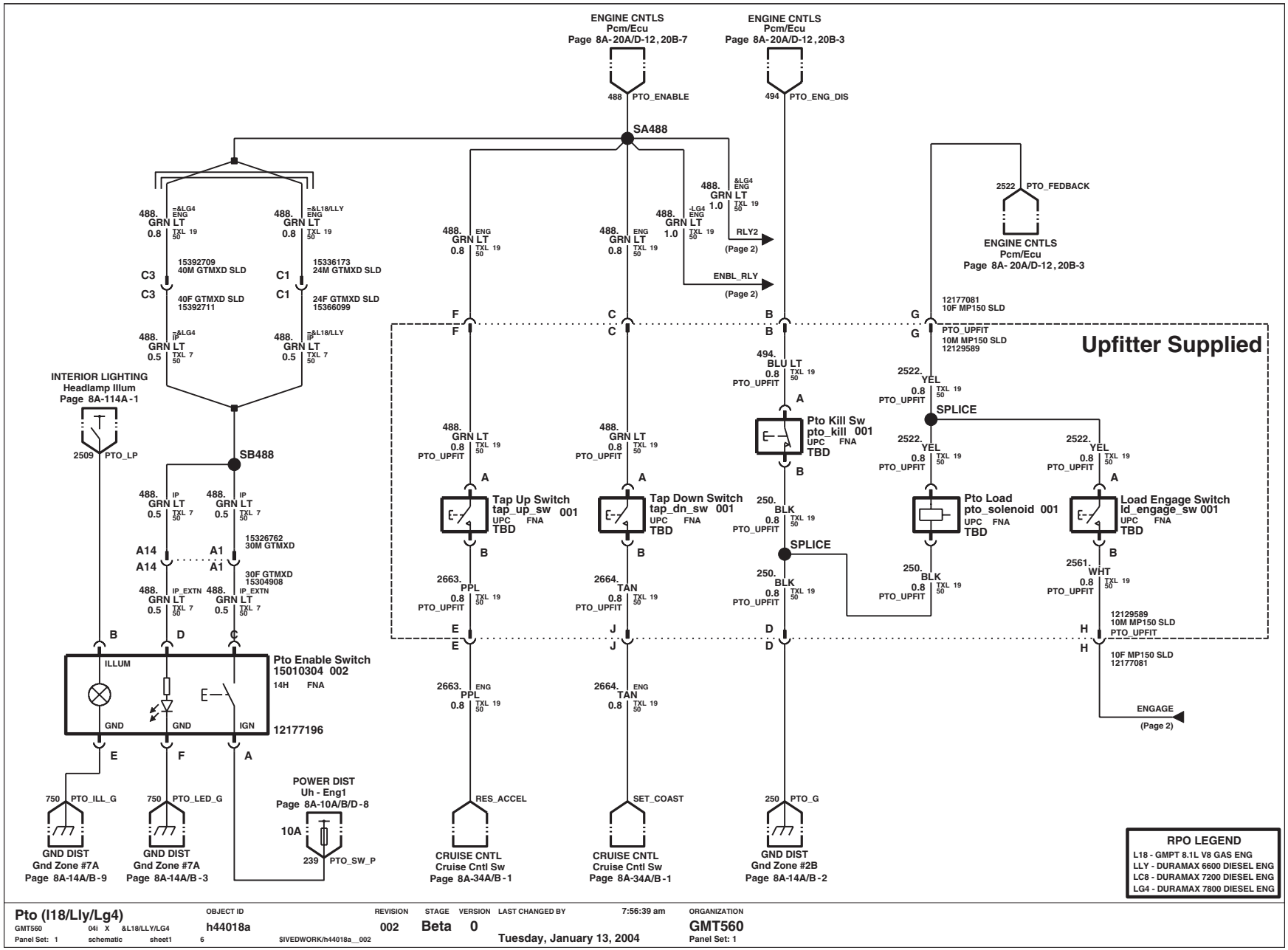
Upfitter (L18/LB7/LG4)
2003 M. D. C Series 03 X &L18/LB7/LG4
Panel Set: 2 schematic sheet1 24

OBJECT ID: h22018a
$IVEDWORK/h22018a__008

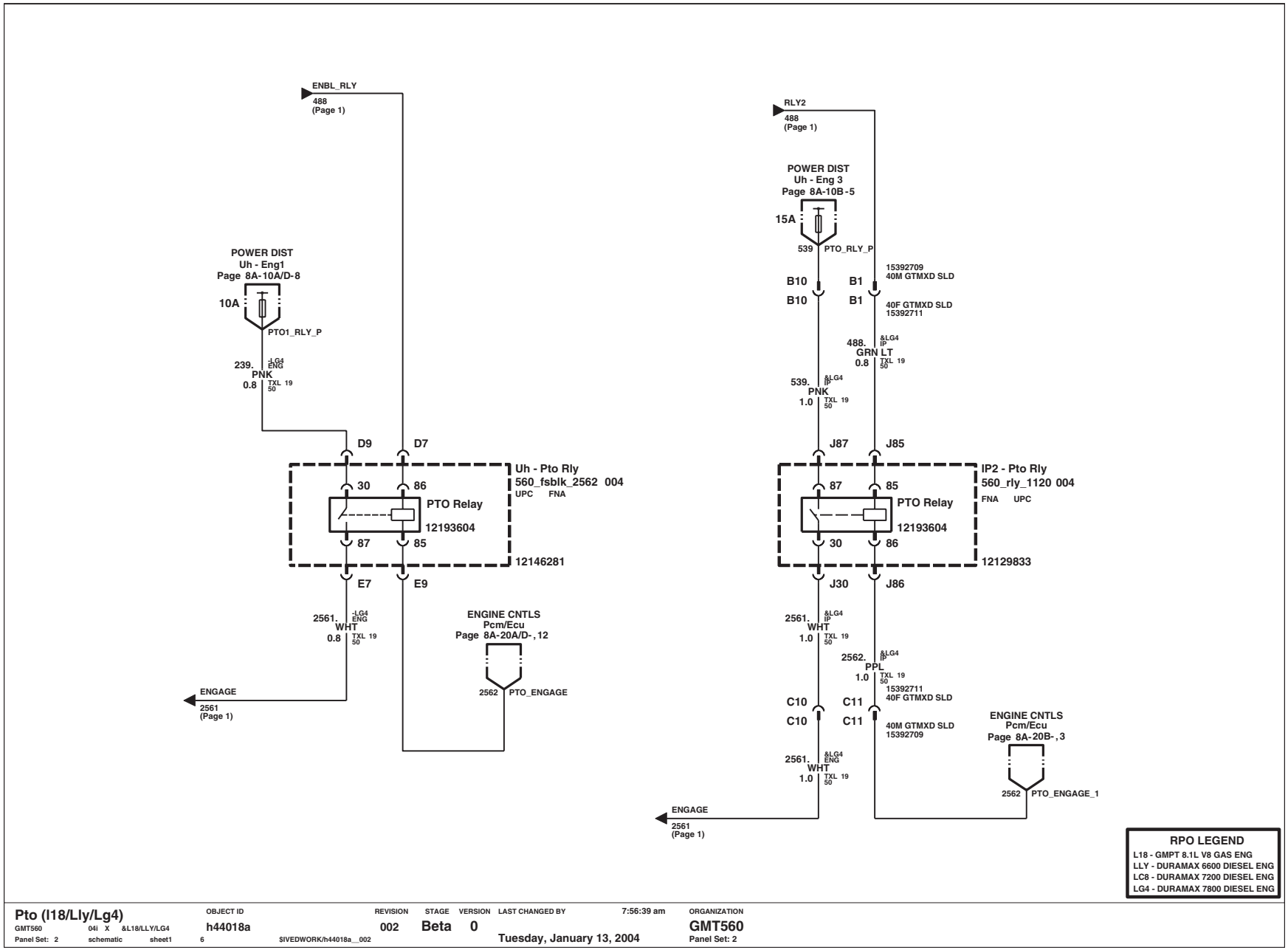
REVISION: 008
STAGE: Pilot
VERSION: B
LAST CHANGED BY:
8:37:07 am
Friday, September 28, 2001

ORGANIZATION
2003 Medium Duty C Series
Panel Set: 2

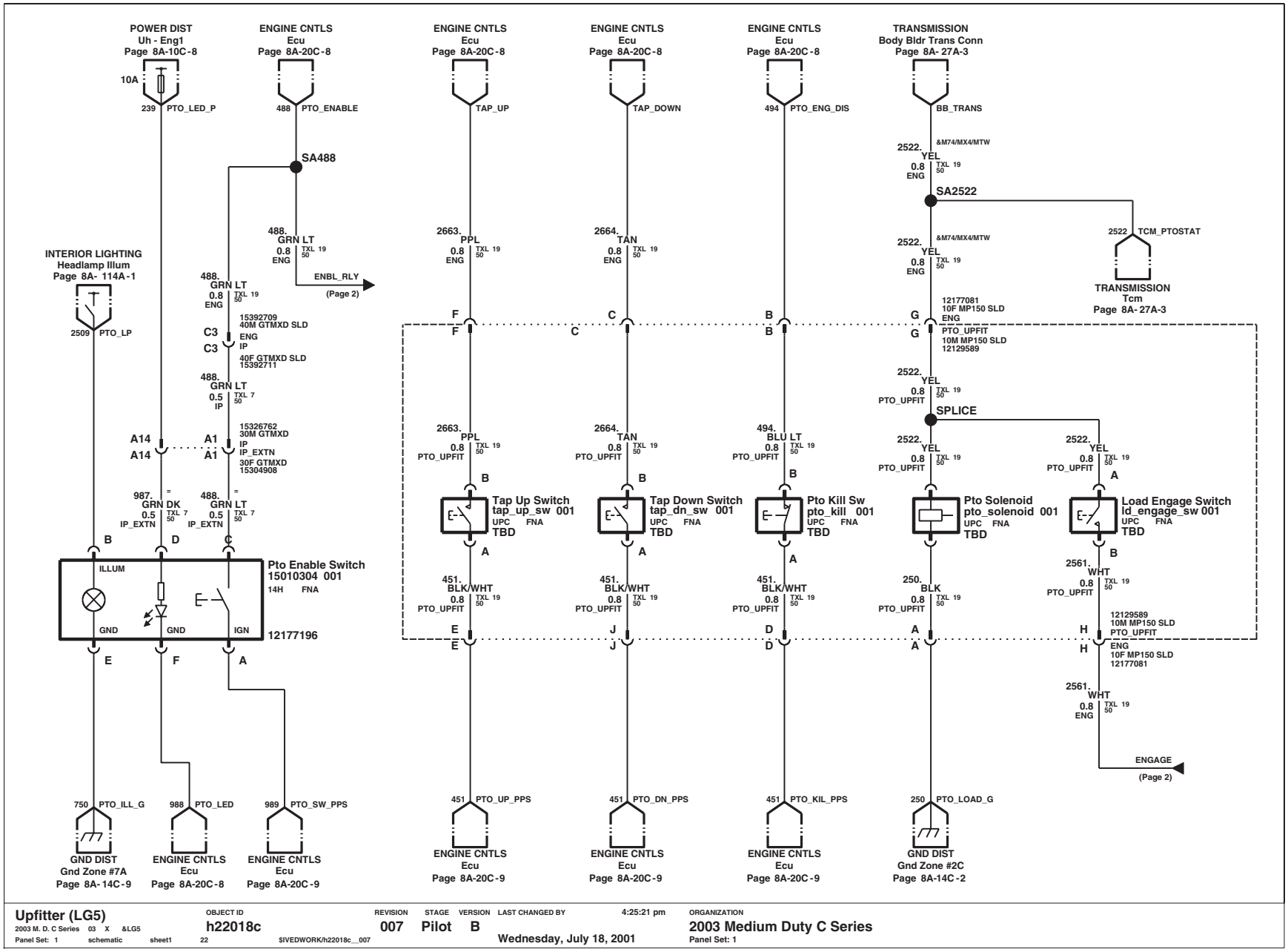
Upfitter Provision-'03-'04 — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax — (LG4) 7.8L-Diesel/Duramax



Upfitter Provision-'03-'04 — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax — (LG4) 7.8L-Diesel/Duramax

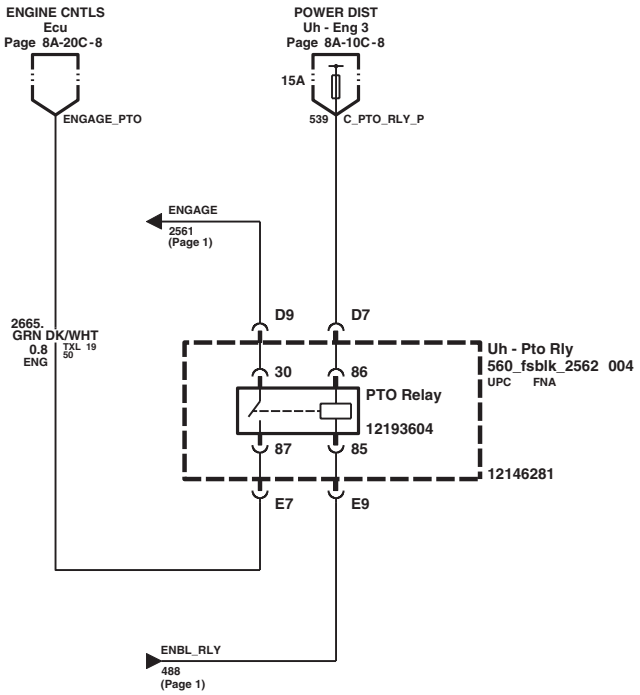


Upfitter Provision — (LG5) 7.2L-Diesel/CAT



Upfitter Provision — (LG5) 7.2L-Diesel/CAT

03 560 000	TY	PILOT B - INITIAL CREATION	27NO00	001
03 560 818	JG	REPLACED CBs WITH MINI-FUSES.	27NO00	001
03 560 1055	LR	Update RPO	18JL01	001



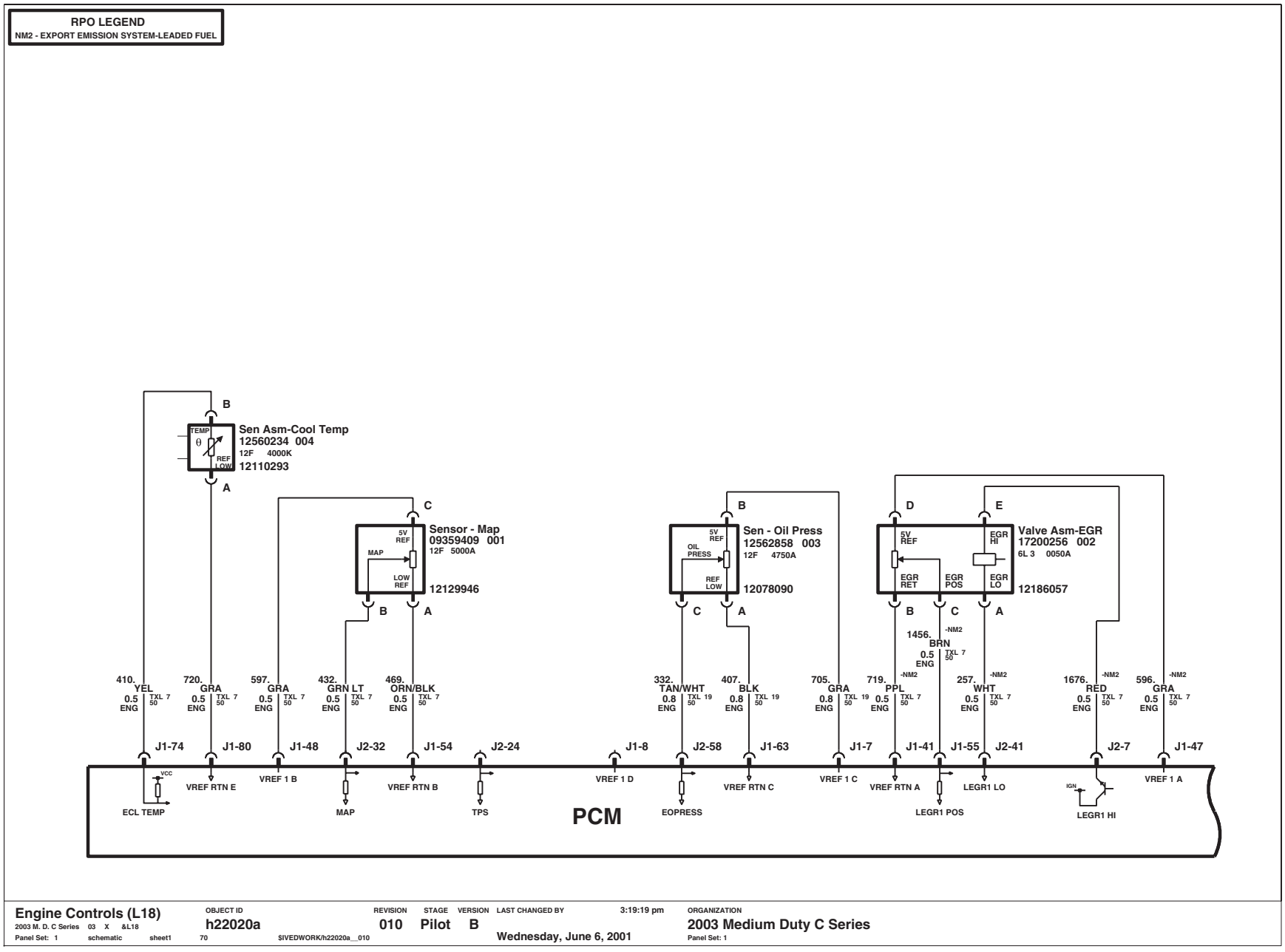
Upfitter (LG5)
2003 M. D. C Series 03 X &LG5
Panel Set: 2 schematic sheet1 22

OBJECT ID: h22018c
$IVEDWORK/h22018c__007

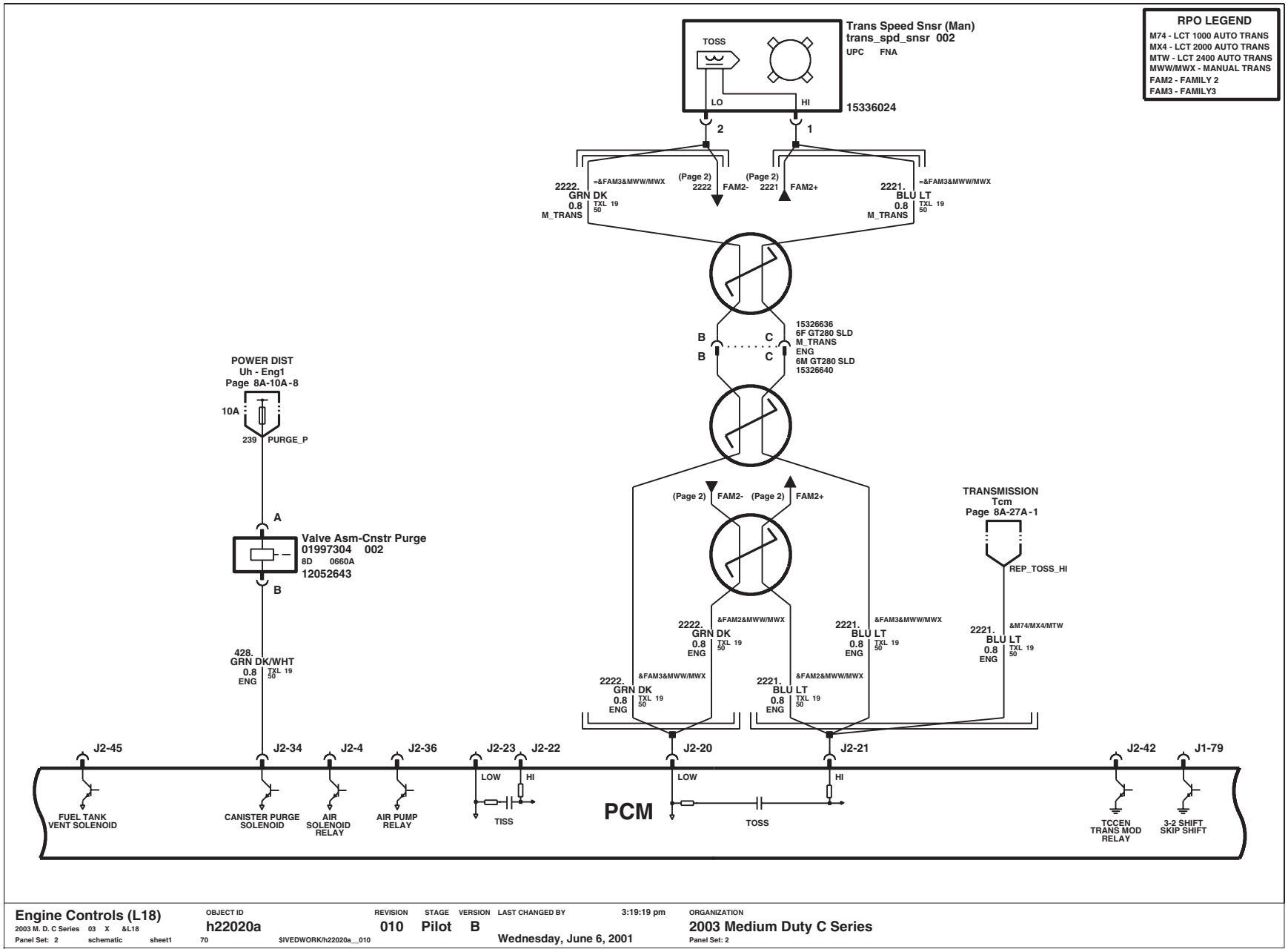
REVISION 007 STAGE Pilot VERSION B
LAST CHANGED BY 4:25:21 pm Wednesday, July 18, 2001

ORGANIZATION
2003 Medium Duty C Series
Panel Set: 2

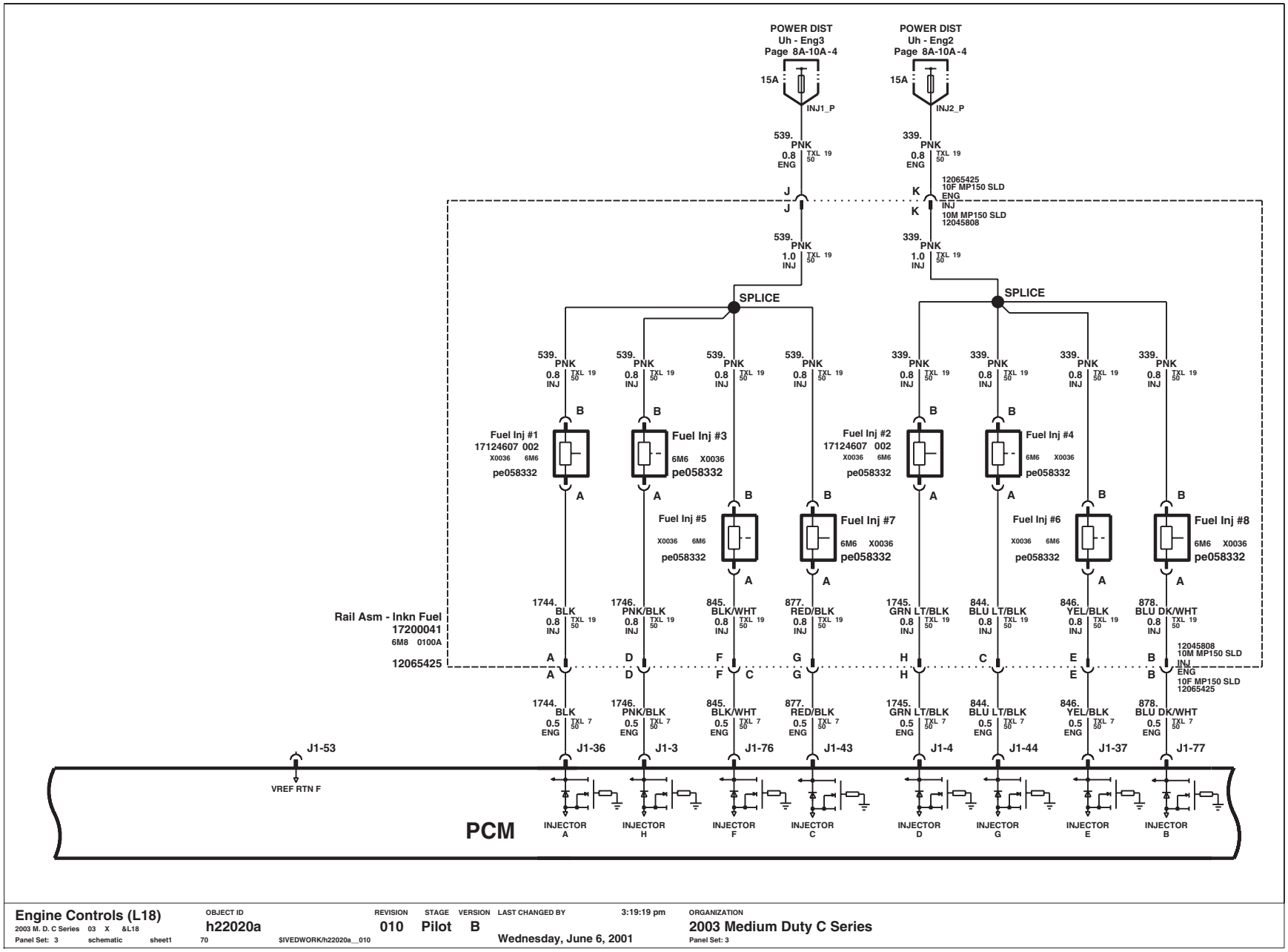
Engine Controls — (L18) 8.1L-Gas/NAPT



Engine Controls — (L18) 8.1L-Gas/NAPT



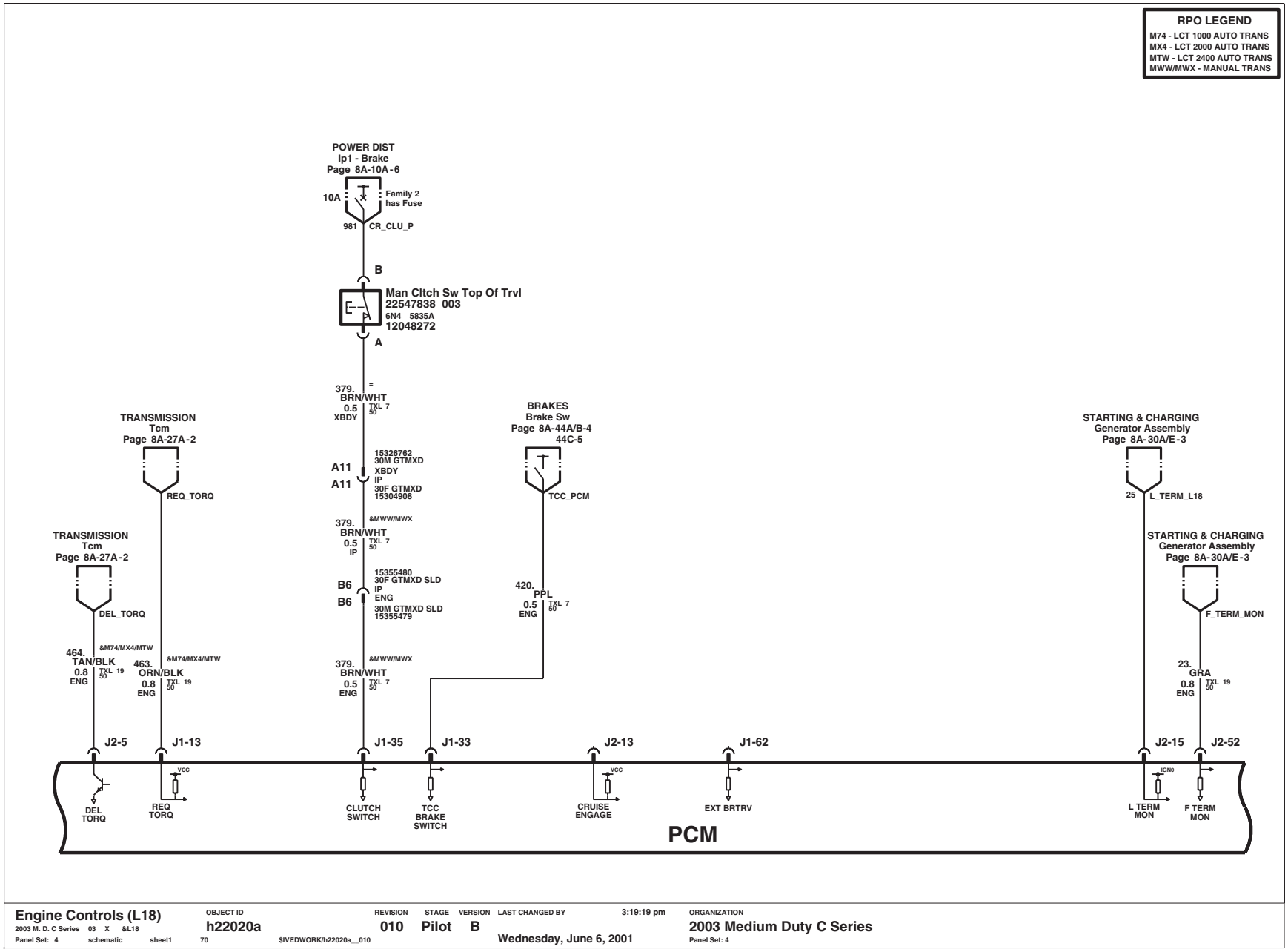
Engine Controls — (L18) 8.1L-Gas/NAPT



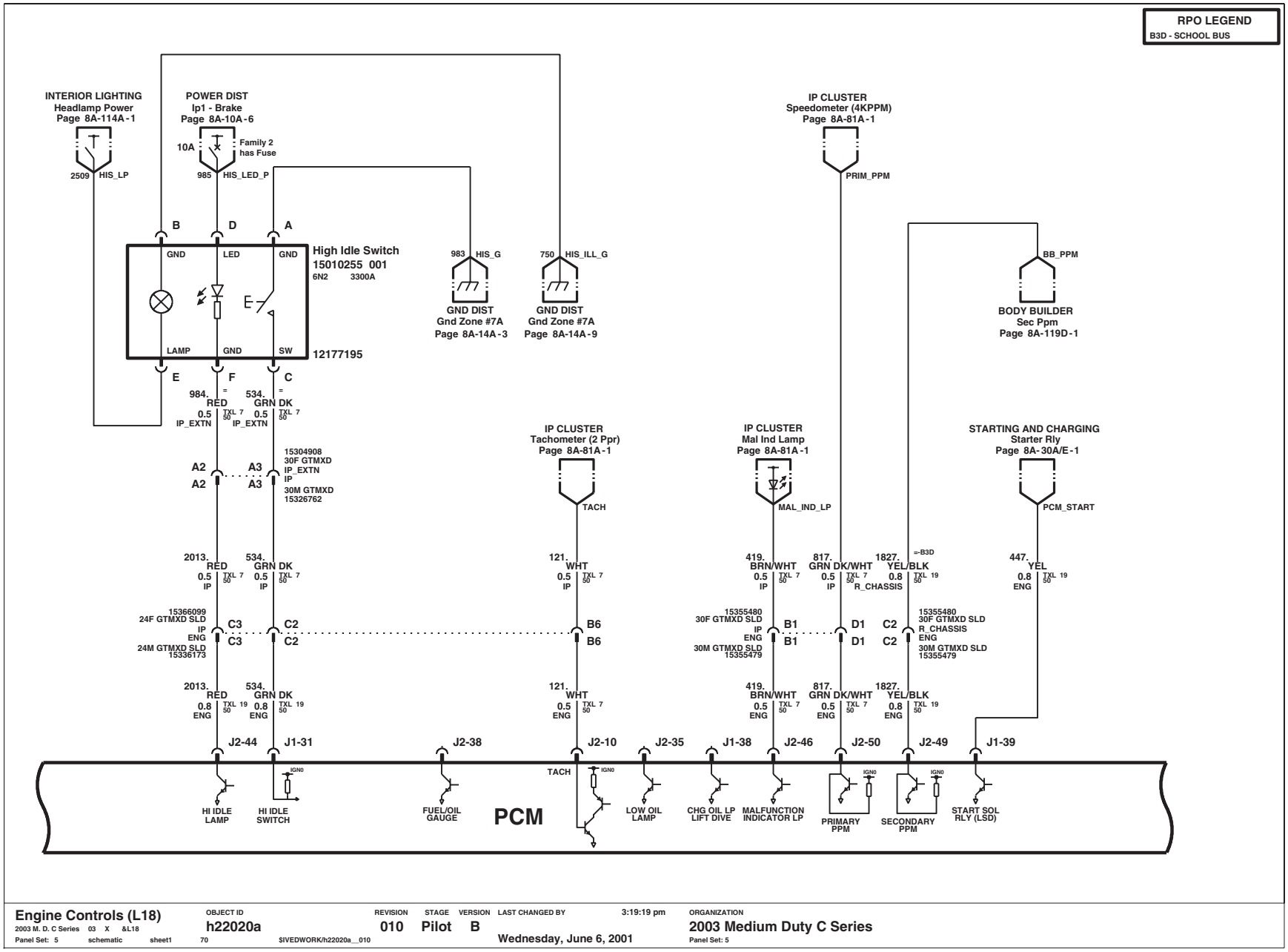
Engine Controls (L18) — OBJECT ID h22020a — REVISION 010 — STAGE Pilot — VERSION B — LAST CHANGED BY — 3:19:19 pm — Wednesday, June 6, 2001 — ORGANIZATION 2003 Medium Duty C Series

2003 M. D. C Series 03 X &L18 — Panel Set: 3 — schematic — sheet1 — 70 — $IVEDWORK/h22020a__010 — Panel Set: 3

Engine Controls — (L18) 8.1L-Gas/NAPT

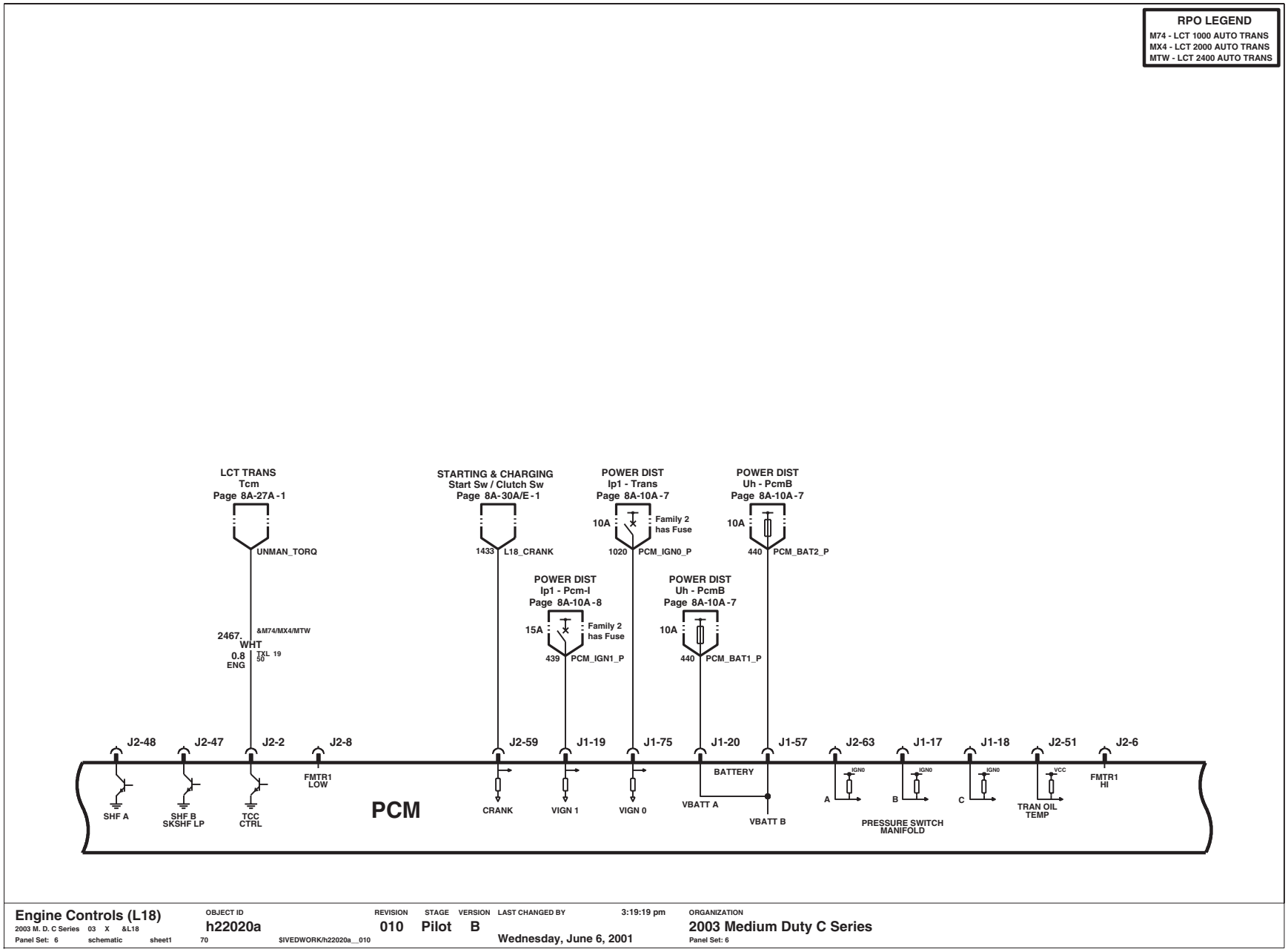


Engine Controls — (L18) 8.1L-Gas/NAPT



Engine Controls (L18)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X &L18	h22020a	010	Pilot	B		3:19:19 pm	2003 Medium Duty C Series
Panel Set: 5 schematic sheet1 70	$IVEDWORK/h22020a__010				Wednesday, June 6, 2001		Panel Set: 5

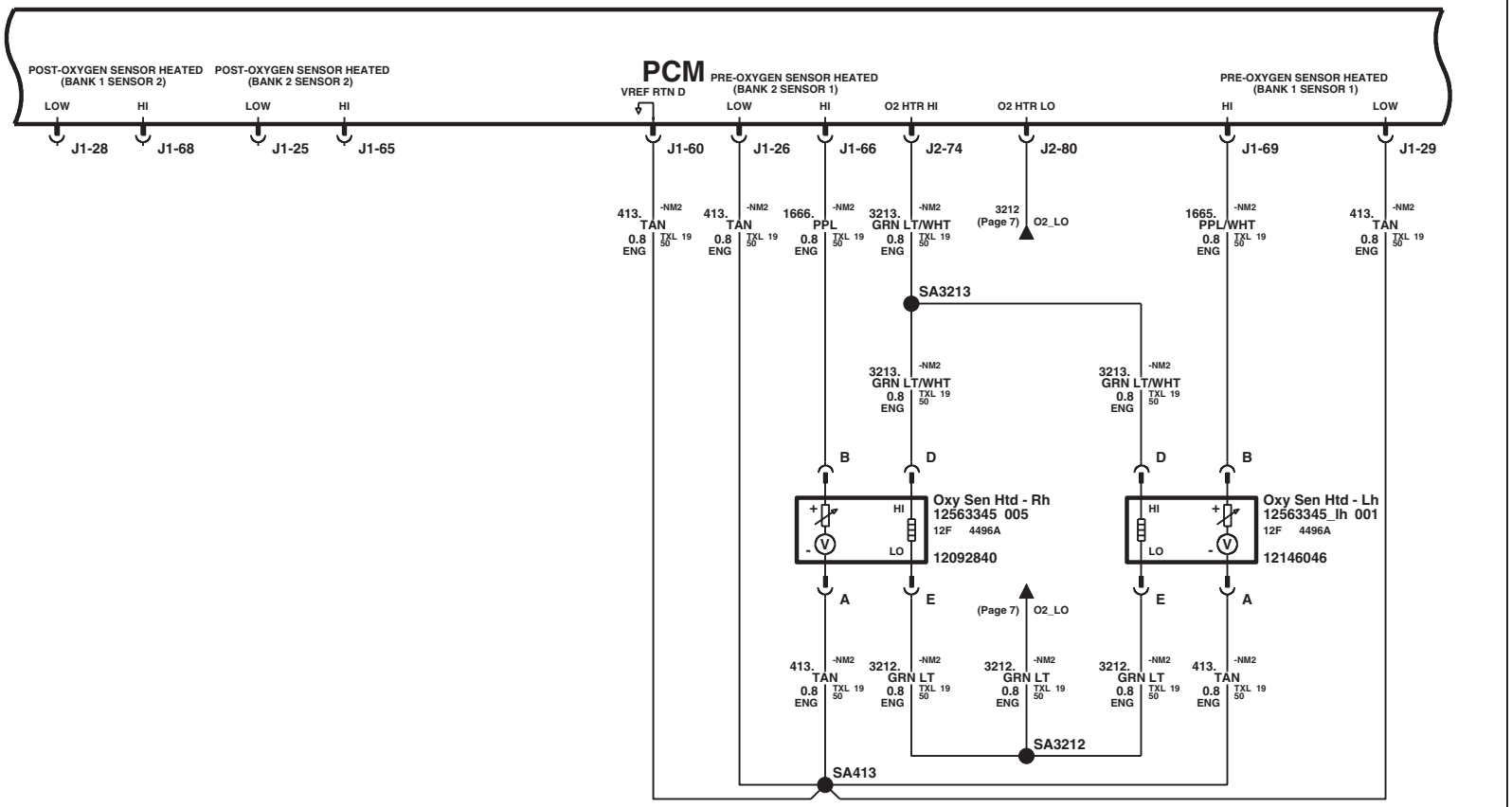
Engine Controls — (L18) 8.1L-Gas/NAPT



Engine Controls (L18)
2003 M. D. C Series 03 X &L18
Panel Set: 6 schematic sheet1 70 $IVEDWORK/h22020a__010

OBJECT ID h22020a
REVISION 010
STAGE Pilot
VERSION B
LAST CHANGED BY
3:19:19 pm
Wednesday, June 6, 2001
ORGANIZATION
2003 Medium Duty C Series
Panel Set: 6

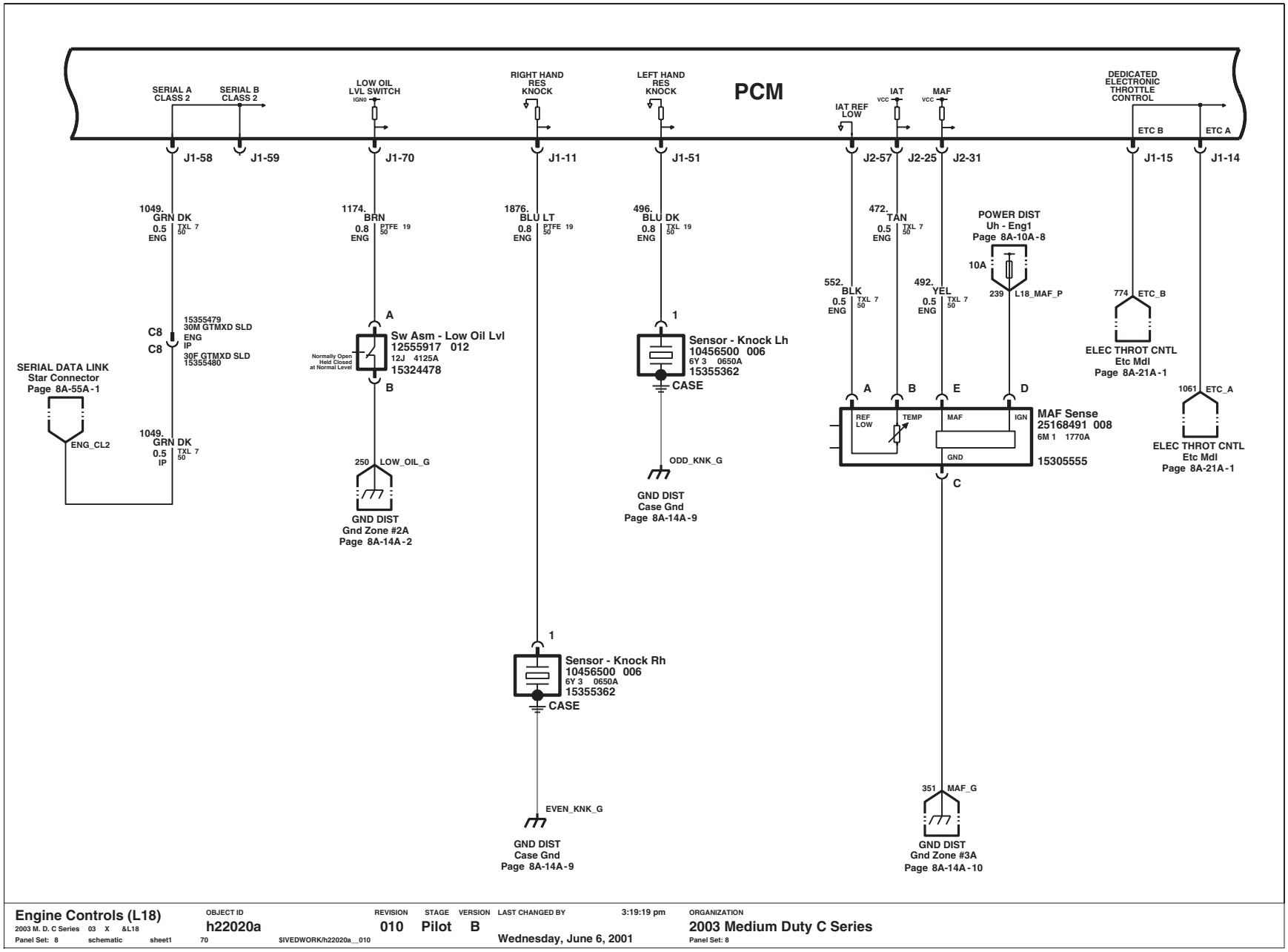
Engine Controls — (L18) 8.1L-Gas/NAPT



RPO LEGEND
NM2 - EXPORT EMISSION SYSTEM-LEADED FUEL

Engine Controls (L18)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X &L18	h22020a	010	Pilot	B		3:19:19 pm	2003 Medium Duty C Series
Panel Set: 7 schematic sheet1 70 $IVEDWORK/h22020a__010					Wednesday, June 6, 2001		Panel Set: 7

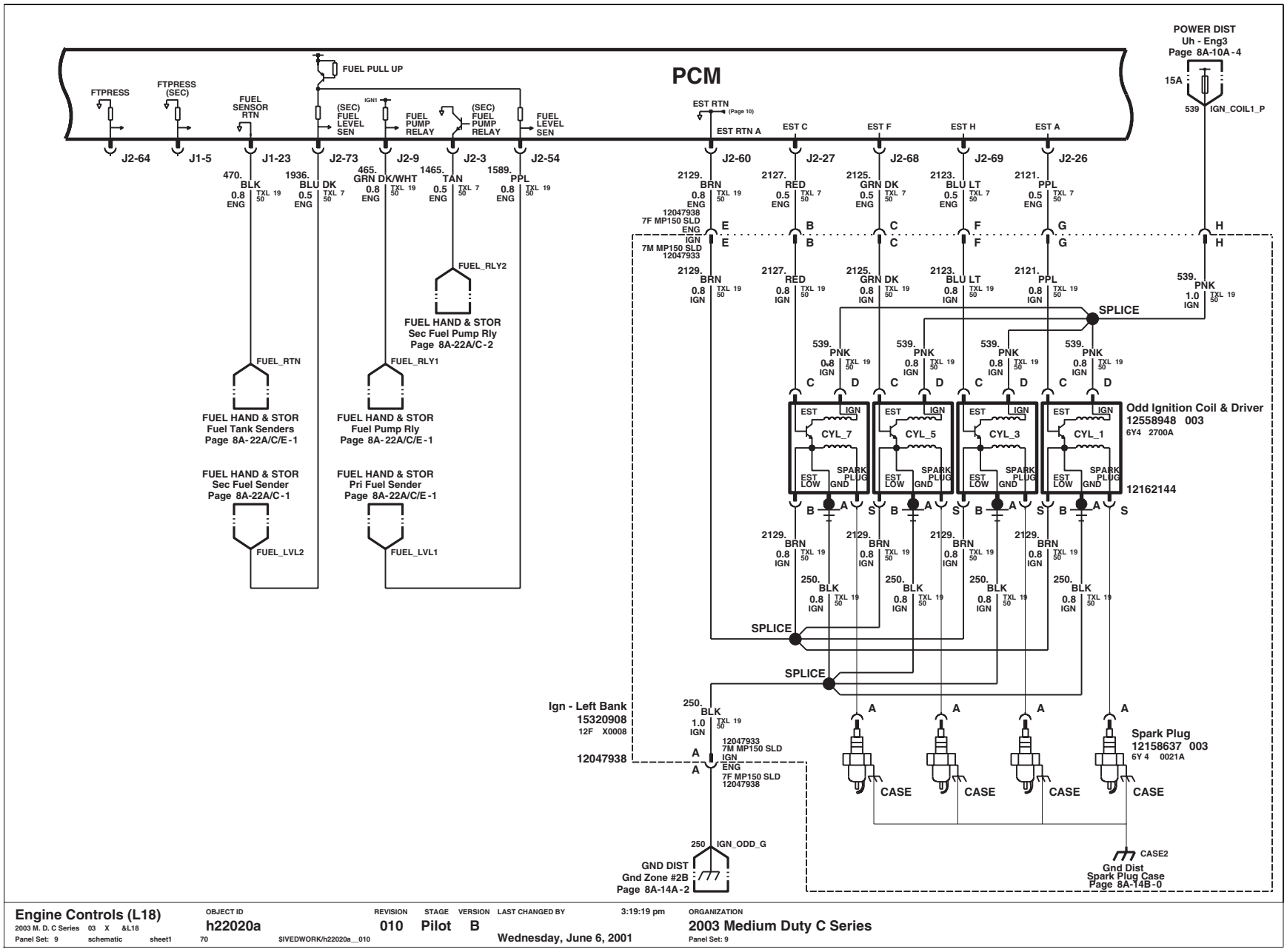
Engine Controls — (L18) 8.1L-Gas/NAPT



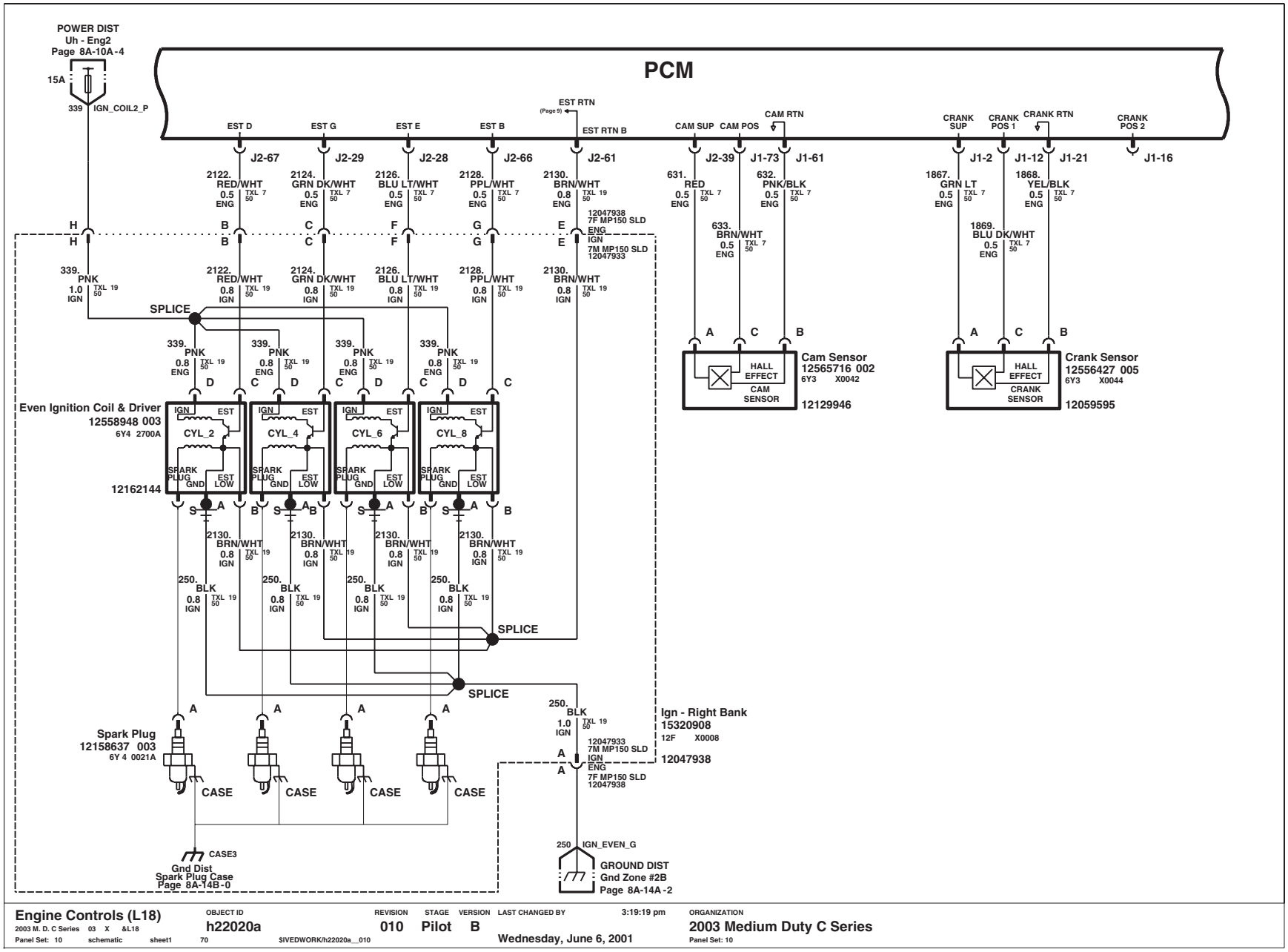
Engine Controls (L18)
2003 M. D. C Series 03 X &L18
Panel Set: 8 schematic sheet1 70 $IVEDWORK/h22020a__010

OBJECT ID h22020a
REVISION 010
STAGE Pilot
VERSION B
LAST CHANGED BY
3:19:19 pm
Wednesday, June 6, 2001
ORGANIZATION
2003 Medium Duty C Series
Panel Set: 8

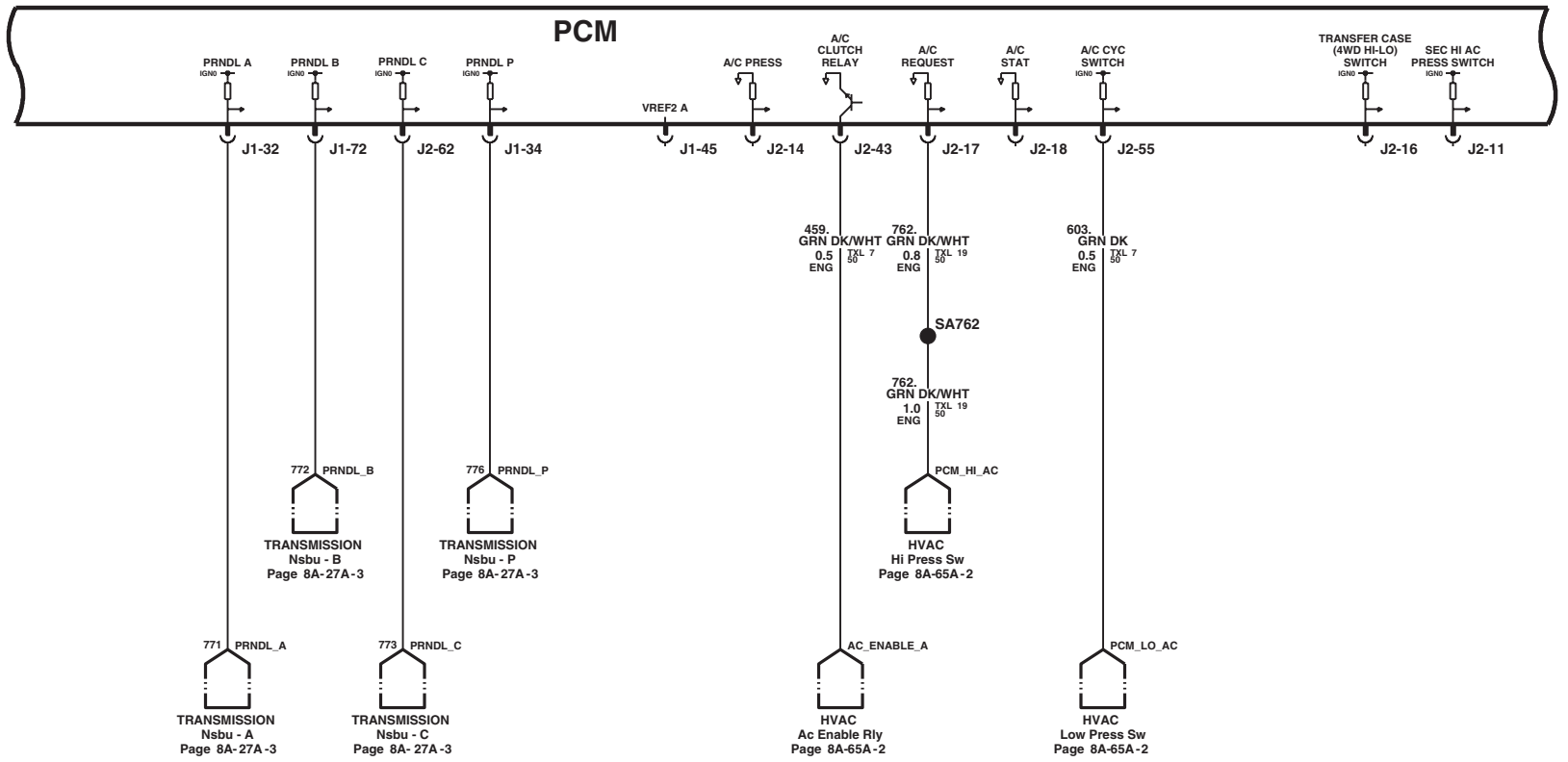
Engine Controls — (L18) 8.1L-Gas/NAPT



Engine Controls — (L18) 8.1L-Gas/NAPT



Engine Controls — (L18) 8.1L-Gas/NAPT



Engine Controls (L18)
2003 M. D. C Series 03 X &L18
Panel Set: 11 schematic sheet1 70

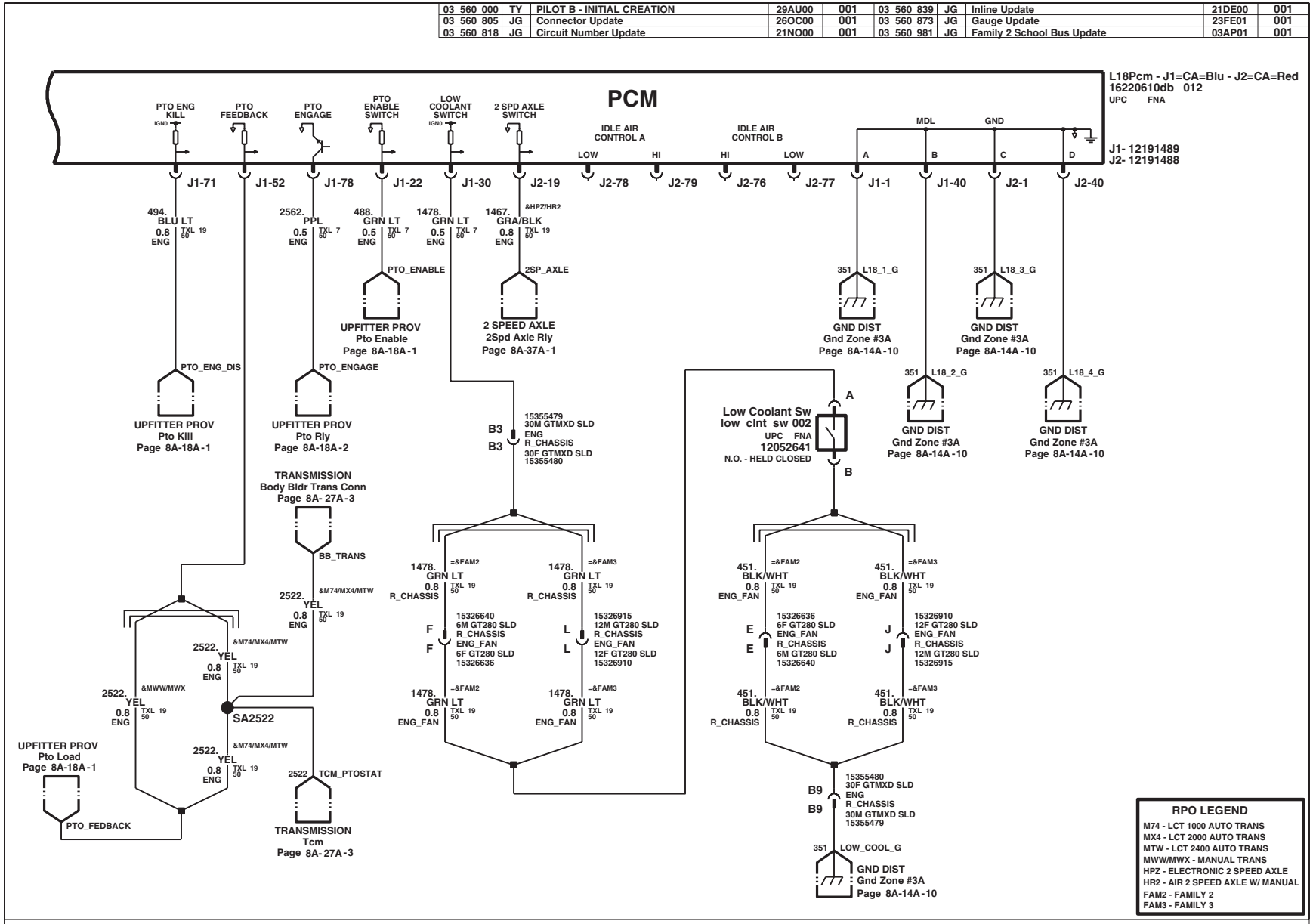
OBJECT ID h22020a
$IVEDWORK/h22020a__010

REVISION 010 STAGE Pilot VERSION B
LAST CHANGED BY
Wednesday, June 6, 2001 3:19:19 pm

ORGANIZATION
2003 Medium Duty C Series
Panel Set: 11

Engine Controls — (L18) 8.1L-Gas/NAPT

03 560 000	TY	PILOT B - INITIAL CREATION	29AU00	001	03 560 839	JG	Inline Update	21DE00	001
03 560 805	JG	Connector Update	26OC00	001	03 560 873	JG	Gauge Update	23FE01	001
03 560 818	JG	Circuit Number Update	21NO00	001	03 560 981	JG	Family 2 School Bus Update	03AP01	001



Engine Controls (L18)
2003 M. D. C Series 03 X &L18
Panel Set: 12 schematic sheet1 70

OBJECT ID: h22020a
$IVEDWORK/h22020a__010

REVISION: 010
STAGE: Pilot
VERSION: B
LAST CHANGED BY:
Wednesday, June 6, 2001
3:19:19 pm

ORGANIZATION
2003 Medium Duty C Series
Panel Set: 12

Engine Controls — (L18) 8.1L-Gas/NAPT

J1 [F] CONNECTOR

PCM CONNECTOR ASSY: 12191489
TPA (BLUE) 2 REQ'D: 12176408
COVER: 12191108

CAVITY	FUNCTION	CIRCUIT/COLOR	USAGE Y	N	N. C.
J1-01	PWR GRD A	151 BLK/WHT	Y		
J1-02	CRANK SENSOR SUPPLY	1867 GRN LT	Y		
J1-03	INJ H	1746 PNK/BLK	Y		
J1-04	INJ D	1745 GRN LT/BLK	Y		
J1-05	FUEL TANK PRESS (SEC)	NC		N	
J1-06	EHC CURRENT MONITOR	NC		N	
J1-07	VREF SUP 1 C	705 GRA	Y		
J1-08	VREF SUP 1 D	NC		N	
J1-09	FLAT ODD HI	NC		N	
J1-10	FLAT EVEN HI	NC		N	
J1-11	RES KNOCK 2	1876 BLU LT	Y		
J1-12	CRANK 1 POS	1869 BLU DK/WHT	Y		
J1-13	REQUEST TORQ	463 ORN/BLK		N	
J1-14	ETC SDATA A	1061 ORN/BLK	Y		
J1-15	ETC SDATA B	774 BLU DK/WHT	Y		
J1-16	CRANK 2 POS	NC		N	
J1-17	TRANS PSM B	NC		N	
J1-18	TRANS PSM C	NC		N	
J1-19	IGN 1	439 PNK	Y		
J1-20	BATT A	440 ORN	Y		
J1-21	CRANK SEN RTN	1868 YEL/BLK	Y		
J1-22	PTO ENAB SW	488 GRN LT	Y		
J1-23	VREF RTN H	470 BLK		N	
J1-24	O2 F LO	NC		N	
J1-25	O2 D LO	NC		N	
J1-26	O2 B LO	413 TAN	Y		
J1-27	O2 E LO	NC		N	
J1-28	O2 C LO	NC	Y		
J1-29	O2 A LO	413 TAN	Y		
J1-30	LOW CLT SW/SIG	1478 GRN LT	Y		
J1-31	HI IDLE SW	534 GRN DK	Y		
J1-32	PRNDL A/CLUTCH SW	771 BLK/WHT		N	
J1-33	TCC BRAKE SW	420 PPL	Y		
J1-34	PRNDL P/P-N SW	776 WHT	Y		
J1-35	EXTENDED CLUTCH SW	379 BRN/WHT	Y		
J1-36	INJ A	1744 BLK	Y		
J1-37	INJ E	846 YEL/BLK	Y		
J1-38	CHNG OIL LP/LIFT DIVE	NC	Y		
J1-39	START RELAY (LSD)	447 YEL	Y		
J1-40	PWR GRD B	151 BLK/WHT	Y		

CAVITY	FUNCTION	CIRCUIT/COLOR	USAGE Y	N	N. C.
J1-41	VREF RTN A	719 PPL	Y		
J1-42	FAN1 RELAY/ENG SHTDWN	NC	Y		
J1-43	INJ C	877 RED/BLK	Y		
J1-44	INJ G	844 BLU LT/BLK	Y		
J1-45	VREF SUP 2 A	NC		N	
J1-46	VREF SUP 2 B	NC		N	
J1-47	VREF SUP 1 A	596 GRA	Y		
J1-48	VREF SUP 1 B	597 GRA	Y		
J1-49	FLAT ODD LO (SHIELD)	NC		N	
J1-50	FLAT EVEN LO (SHIELD)	NC		N	
J1-51	RES KNOCK 1	496 BLU DK	Y		
J1-52	PTO STATUS	2522 YEL	Y		
J1-53	VREF RTN F	NC		N	
J1-54	VREF RTN B	469 ORN/BLK	Y		
J1-55	LEGR 1 POS	1456 BRN	Y		
J1-56	FUEL COMPOSITION SEN	NC		N	
J1-57	BATT B	440 ORN	Y		
J1-58	CLASS 2 SDATA A	1049 GRN DK	Y		
J1-59	CLASS 2 SDATA B	NC		N	
J1-60	VREF RTN D	413 TAN	Y		
J1-61	CAM SENSOR RTN	632 PNK/BLK	Y		
J1-62	EXTENDED BRAKE SW	NC		N	
J1-63	VREF RTN C	407 BLK	Y		
J1-64	O2 F HI	NC		N	
J1-65	O2 D HI	NC		N	
J1-66	O2 B HI	1666 PPL	Y		
J1-67	O2 E HI	NC		N	
J1-68	O2 C HI	NC	Y		
J1-69	O2 A HI	1665 PPL/WHT	Y		
J1-70	LOW OIL SW	1174 BRN		N	
J1-71	PTO ENGINE KILL SW	494 BLU LT	Y		
J1-72	PRNDL B	772 YEL		N	
J1-73	CAM SEN POS	633 BRN/WHT	Y		
J1-74	ENG CLT TEMP	410 YEL	Y		
J1-75	IGN 0	1020 PNK		N	
J1-76	INJ F	845 BLK/WHT	Y		
J1-77	INJ B	878 BLU DK/WHT	Y		
J1-78	PTO ENGAGE	2562 PPL		N	
J1-79	3/2 SHIFT/SKIP SHIFT	NC		N	
J1-80	VREF RTN E	720 GRA	Y		

J2 [S] CONNECTOR

PCM CONNECTOR ASSY: 12191488
TPA (RED) 2 REQ'D: 12176410
COVER: 12191108

CAVITY	FUNCTION	CIRCUIT/COLOR	USAGE Y	N	N. C.
J2-01	PWR GRD C	151 BLK/WHT	Y		
J2-02	TCC CONTROL SOL	2467 WHT		N	
J2-03	EHC COM/SEC F_PMP RLY	1465 TAN		N	
J2-04	AIR SOL RELAY	NC		N	
J2-05	DELIVERED TORQ	464 TAN/BLK		N	
J2-06	FMTR 1 HI	NC		N	
J2-07	LEGR 1 HI	1676 RED	Y		
J2-08	FMTR 1 LO	NC		N	
J2-09	FUEL PUMP RELAY	465 GRN DK/WHT	Y		
J2-10	TACH	121 WHT	Y		
J2-11	SEC A/C HI PRESS SW	NC	Y		
J2-12	LEGR 2 POS	NC		N	
J2-13	CRUISE ENGAGED	NC		N	
J2-14	A/C PRESS SEN	NC		N	
J2-15	ALT L TERM	25 BRN	Y		
J2-16	4WD LOW GEAR SW	NC		N	
J2-17	A/C REQUEST	762 GRN DK/WHT	Y		
J2-18	A/C STATUS	NC		N	
J2-19	FRT AXLE SW	1467 GRA/BLK	Y		
J2-20	TOSS LO	2222 GRN DK	Y		
J2-21	TOSS HI	2221 BLU LT	Y		
J2-22	TISS HI	NC		N	
J2-23	TISS LO	NC		N	
J2-24	TPS	NC		N	
J2-25	INDUCTION AIR TEMP	472 TAN	Y		
J2-26	EST A	2121 PPL	Y		
J2-27	EST C	2127 RED	Y		
J2-28	EST E	2126 BLU LT/WHT	Y		
J2-29	EST G	2124 GRN DK/WHT	Y		
J2-30	VATS	NC		N	
J2-31	MAF	492 YEL	Y		
J2-32	MAP	432 GRN LT	Y		
J2-33	FAN 2/CK GA LP/ACREC	NC	Y		
J2-34	CANISTER PURGE	428 GRN DK/WHT	Y		
J2-35	LOW OIL LP	NC		N	
J2-36	AIR PUMP RELAY	NC		N	
J2-37	SEE NOTES BELOW	NC	Y		
J2-38	FUEL/OIL PRESS GA	NC	Y		
J2-39	CAM SEN SUP	631 RED	Y		
J2-40	PWR GRD D	151 BLK/WHT	Y		

J2-37 REDUCED ENGINE PWR LP/CRUISE INHIBIT

J2-47 SHIFT B/SHIP SHIFT LP/ENGOVSPD LP/UPSHIFT LP

Engine Controls (L18) OBJECT ID h22020a REVISION 010 STAGE Pilot VERSION B LAST CHANGED BY 3:19:19 pm Wednesday, June 6, 2001 ORGANIZATION 2003 Medium Duty C Series
2003 M. D. C Series 03 X &L18 Panel Set: 13 schematic sheet1 70 $IVEDWORK/h22020a__010 Panel Set: 13

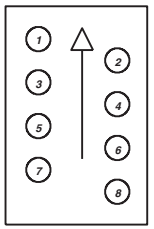
Engine Controls — (L18) 8.1L-Gas/NAPT

Pcm 32w97 Pin Map
97pinmap_mark 005

CAVITY	FUNCTION	CIRCUIT/COLOR	USAGE Y	USAGE N	USAGE N. C.
J2-41	LEGR 1 LO	257 WHT	Y		
J2-42	TCC ENAB/TR MD RELAY	NC	Y		
J2-43	A/C CLUTCH RELAY	459 GRN DK/WHT	Y		
J2-44	HI ID LP/REVLKOUT SOL	2013 RED	Y		
J2-45	FUEL TANK VENT	NC		N	
J2-46	MALF IND LAMP	419 BRN/WHT	Y		
J2-47	SEE NOTES BELOW	NC	Y		
J2-48	SHIFT A	NC		N	
J2-49	SECONDARY PPM	1827 YEL/BLK		N	
J2-50	PRIMARY PPM	817 GRN DK/WHT	Y		
J2-51	TRANS OIL TEMP	NC		N	
J2-52	ALT F TERM	23 GRA	Y		
J2-53	TCS/SPK_RTD/MIL REQ	NC		N	
J2-54	FUEL LEVEL SEN	1589 PPL	Y		
J2-55	A/C PRESS CYC SW	603 GRN DK	Y		
J2-56	EHC DIAGNOSTIC	NC		N	
J2-57	VREF RTN G (IATREFLO)	552 BLK	Y		
J2-58	ENG OIL PRESS	332 TAN/WHT	Y		
J2-59	CRANK REQUEST	806 PPL	Y		
J2-60	EST RTN ODD	2129 BRN	Y		
J2-61	EST RTN EVEN	2130 BRN/WHT	Y		
J2-62	PRNDL C	773 GRA		N	
J2-63	TRANS PSM A	NC		N	
J2-64	FUEL TANK PRESS	NC		N	
J2-65	EHC VOLTAGE MONITOR	NC		N	
J2-66	EST B	2128 PPL/WHT	Y		
J2-67	EST D	2122 RED/WHT	Y		
J2-68	EST F	2125 GRN DK	Y		
J2-69	EST H	2123 BLU LT	Y		
J2-70	CAN SDATA HI	NC		N	
J2-71	CAN SDATA LO	NC		N	
J2-72	FMTR 2 LO	NC		N	
J2-73	FUEL LEVEL SEN (SEC)	1936 BLU DK		N	
J2-74	LEGR 2 HI	3213 GRN LT/WHT	Y		
J2-75	FMTR 2 HI	NC		N	
J2-76	IAC B HI	NC		N	
J2-77	IAC B LO	NC		N	
J2-78	IAC A LO	NC		N	
J2-79	IAC A HI	NC		N	
J2-80	LEGR 2 LO	3212 GRN LT	Y		

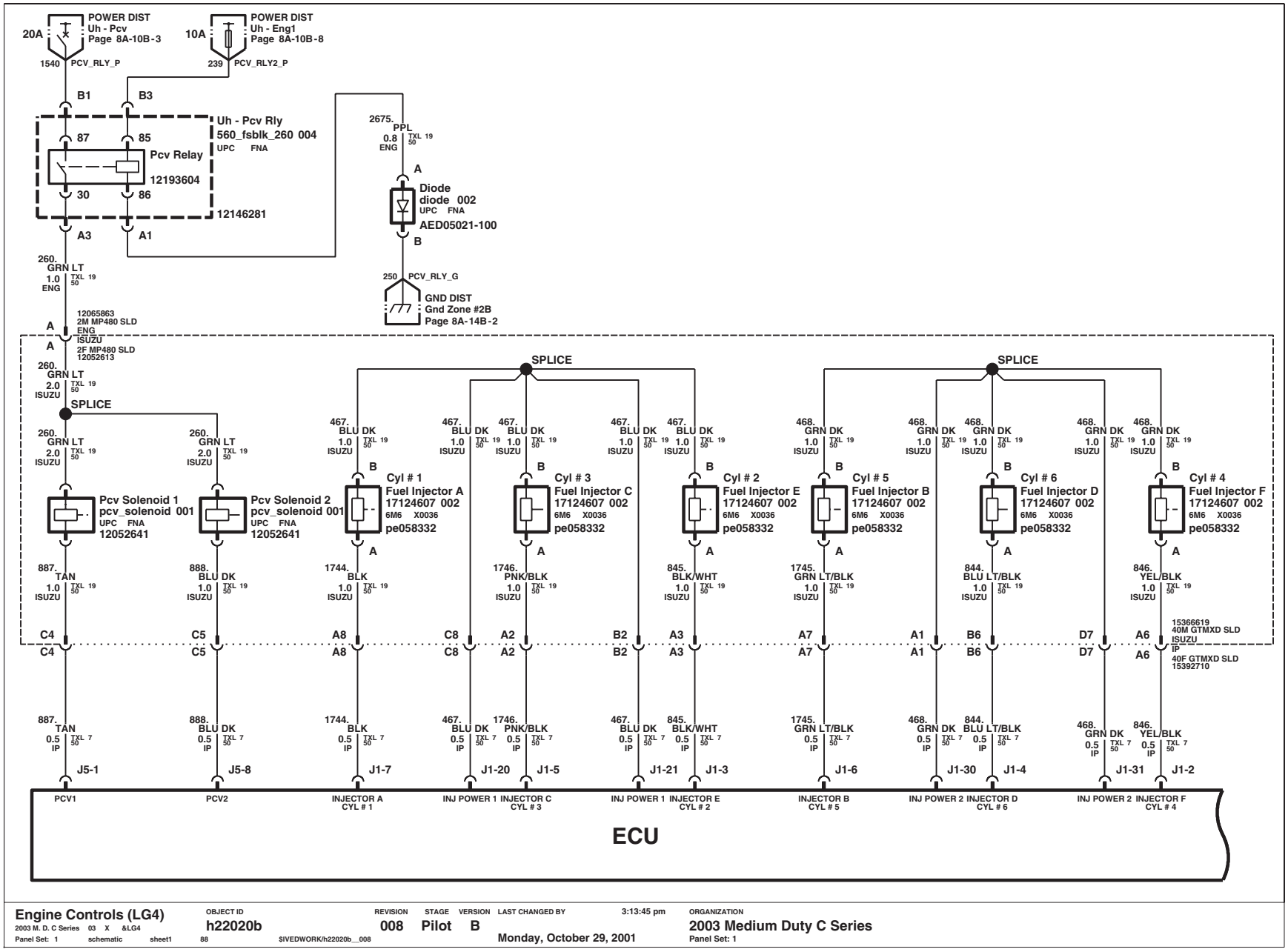
NOTE #	COMMENTS
1	OXYGEN SENSORS REQUIRE AIR REFERENCE, WHICH SHALL BE PROVIDED THROUGH THE WIRES CONNECTING THE OXYGEN SENSOR TO THE PCM.
2	BRAKE SWITCHES SPECIFIC PRIORITIES AND DEPENDENCIES DESCRIPTION — ORDER OF STATE CHANGE CC/TCC — 1 BLS — 2 BTS1 — 3
3	LEGEND FOR "OBJECT ID" OBJECT ID = h22020a
4	FIRING ORDER 1 - 8 - 7 - 2 - 6 - 5 - 4 - 3 EST DRIVERS A - B - C - D - E - F - G - H (GEN III & MARK)

FORWARD

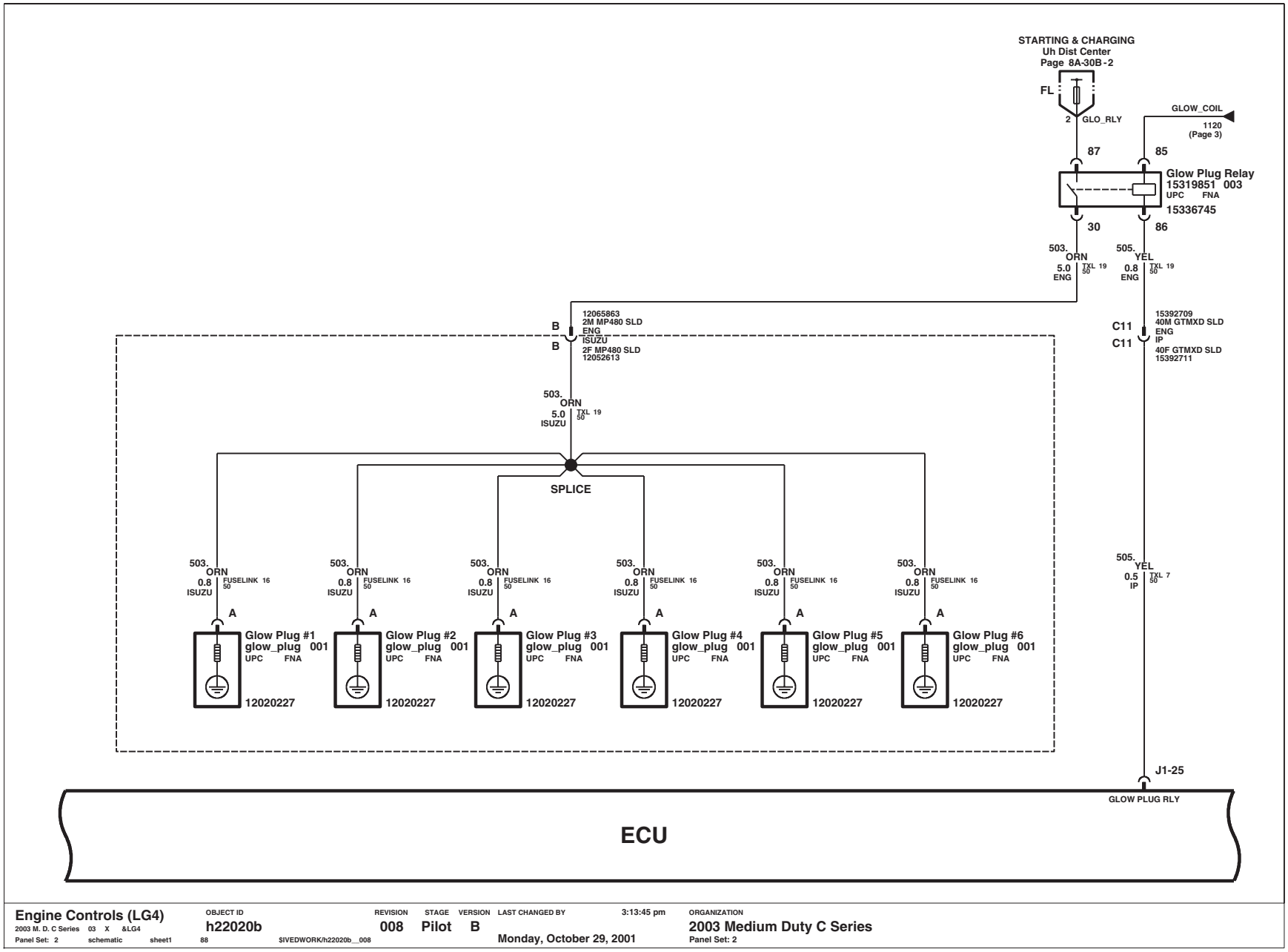


Engine Controls (L18) | OBJECT ID h22020a | REVISION 010 | STAGE Pilot | VERSION B | LAST CHANGED BY | 3:19:19 pm Wednesday, June 6, 2001 | ORGANIZATION 2003 Medium Duty C Series
2003 M. D. C Series 03 X &L18 | Panel Set: 14 schematic sheet1 70 $IVEDWORK/h22020a__010 | Panel Set: 14

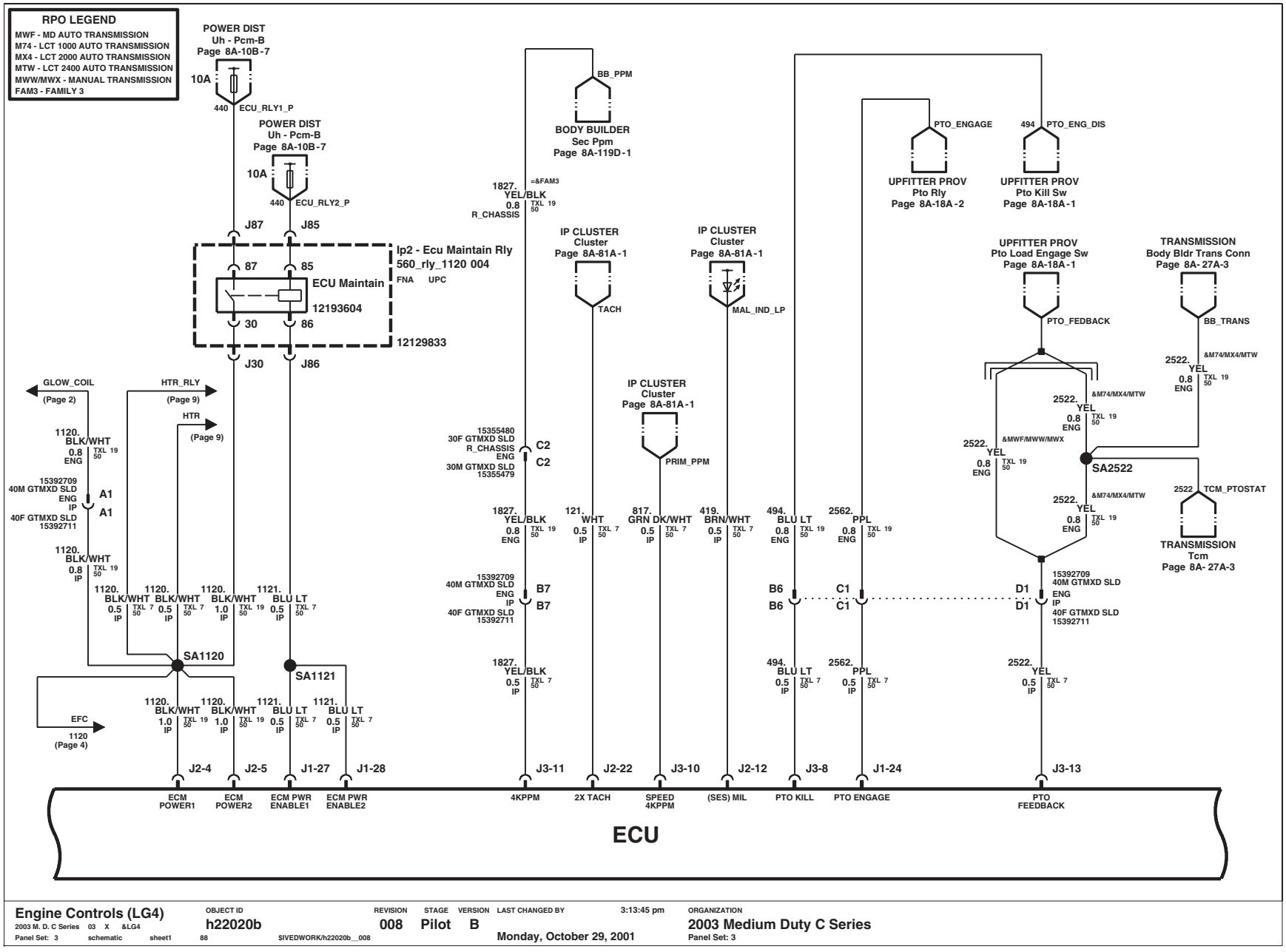
Engine Controls — (LG4-'03-'04) 7.8L-Diesel/Duramax



Engine Controls — (LG4-'03-'04) 7.8L-Diesel/Duramax



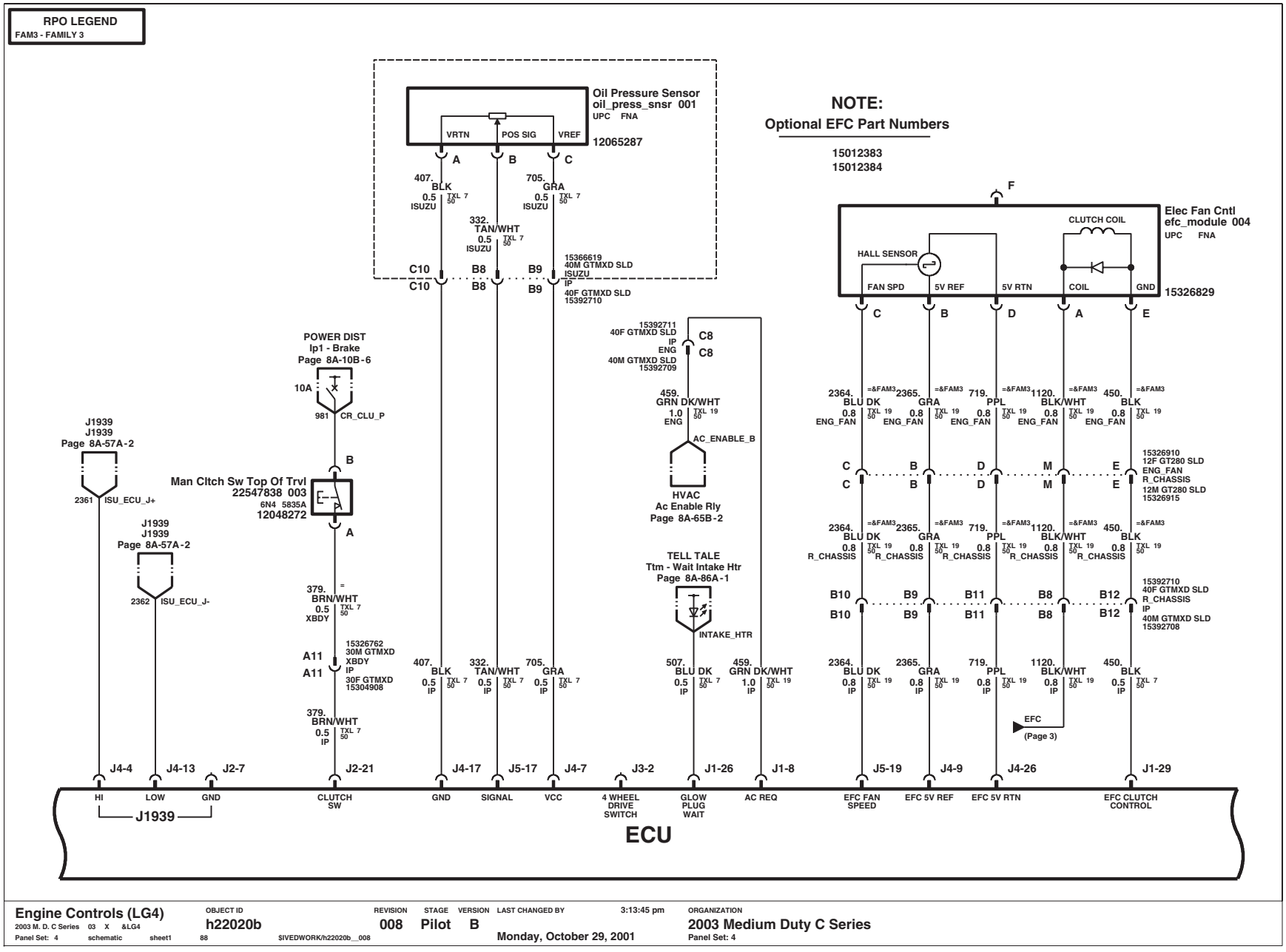
Engine Controls — (LG4-'03-'04) 7.8L-Diesel/Duramax



Engine Controls (LG4)
2003 M. D. C Series 03 X &LG4
Panel Set: 3 schematic sheet1 88

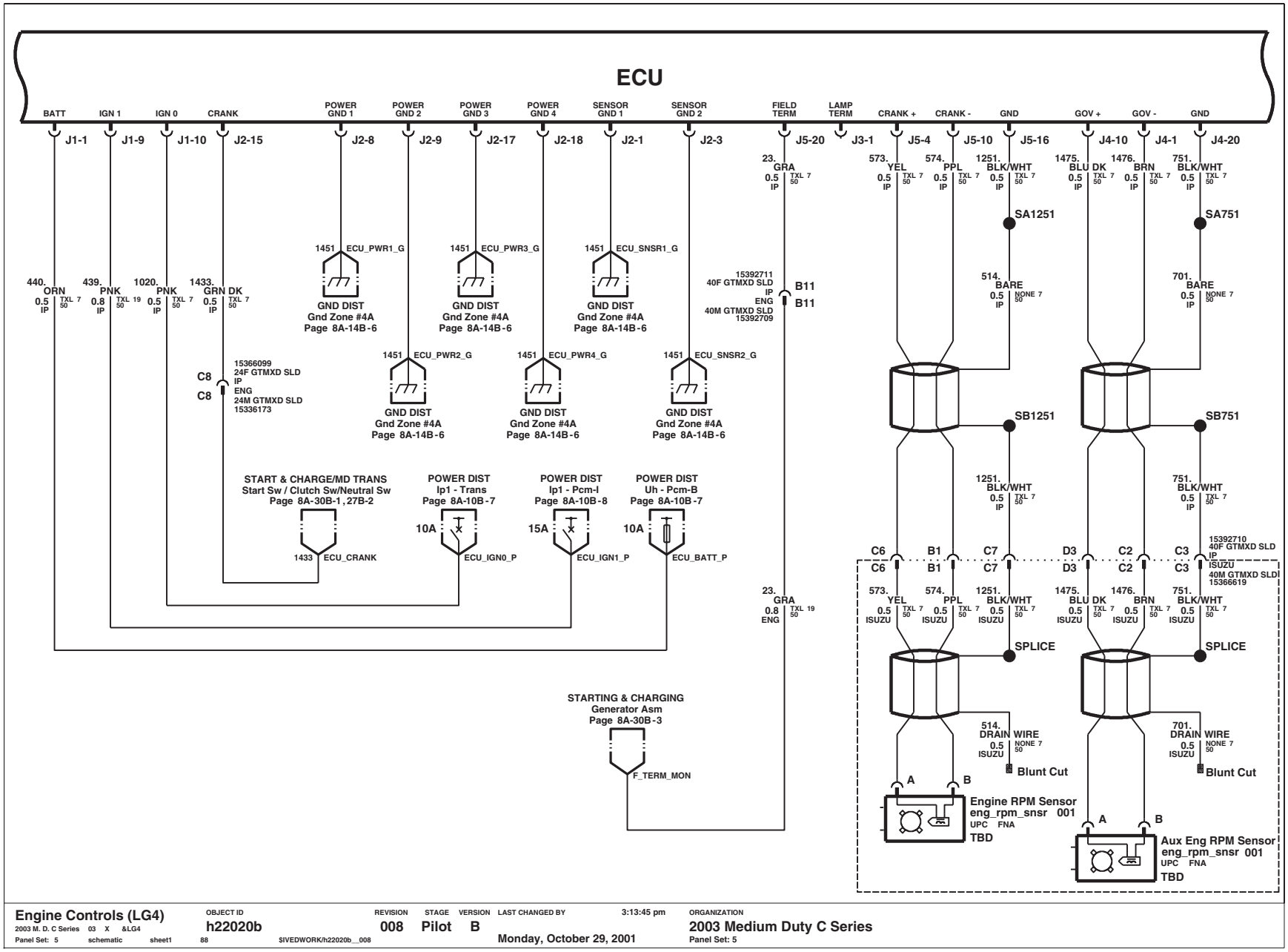
OBJECT ID: h22020b
REVISION: 008
STAGE: Pilot
VERSION: B
LAST CHANGED BY: $IVEDWORK/h22020b__008
3:13:45 pm
Monday, October 29, 2001
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 3

Engine Controls — (LG4-'03-'04) 7.8L-Diesel/Duramax



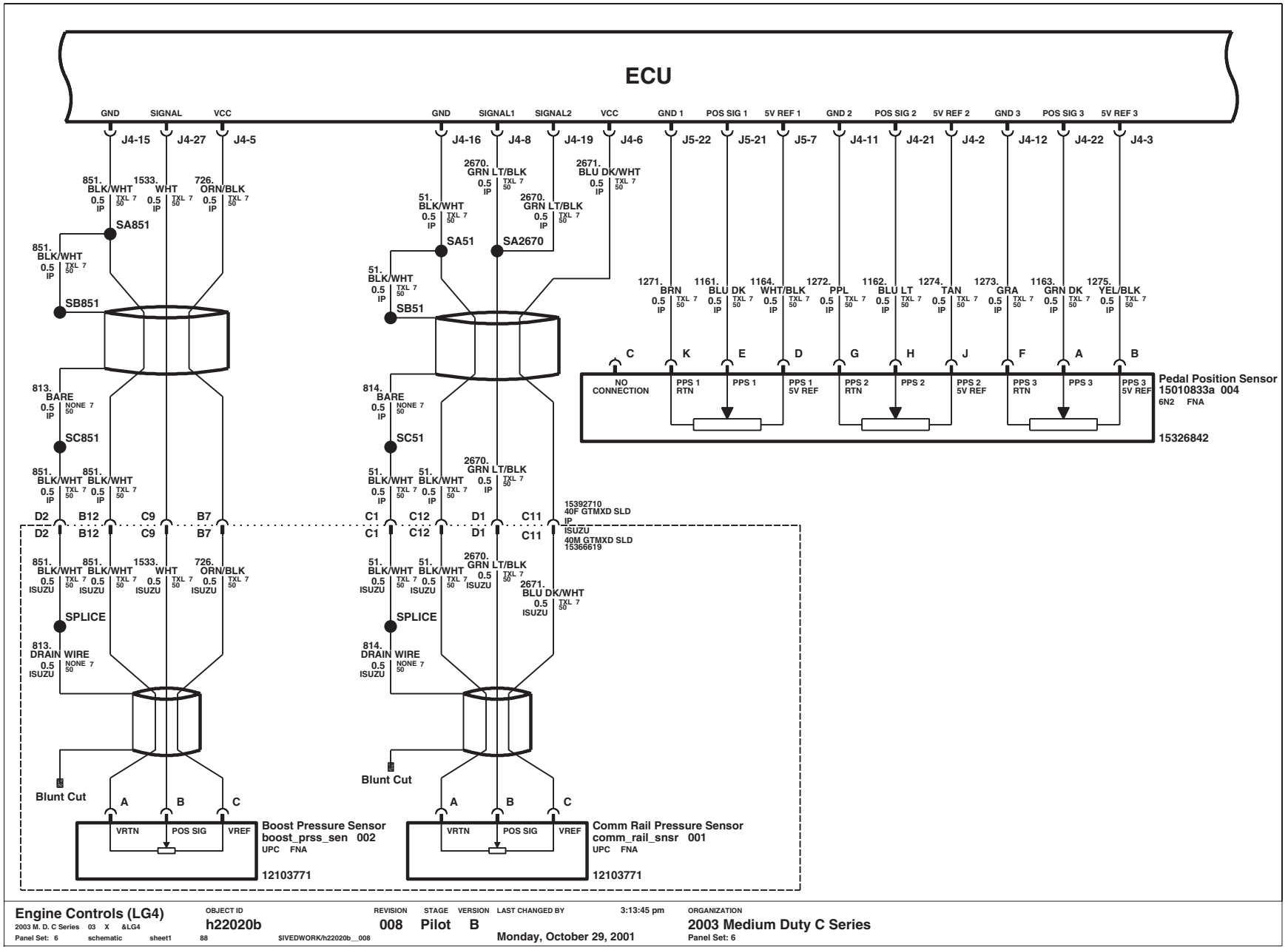
Engine Controls (LG4) | OBJECT ID h22020b | REVISION 008 | STAGE Pilot | VERSION B | LAST CHANGED BY | 3:13:45 pm | ORGANIZATION 2003 Medium Duty C Series
2003 M. D. C Series 03 X &LG4 | Panel Set: 4 | schematic | sheet1 | 88 | $IVEDWORK/h22020b__008 | Monday, October 29, 2001 | Panel Set: 4

Engine Controls — (LG4-'03-'04) 7.8L-Diesel/Duramax



Engine Controls (LG4)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X &LG4	h22020b	008	Pilot	B		3:13:45 pm	2003 Medium Duty C Series
Panel Set: 5 schematic sheet1 88	SIVEDWORK/h22020b__008				Monday, October 29, 2001		Panel Set: 5

Engine Controls — (LG4-'03-'04) 7.8L-Diesel/Duramax



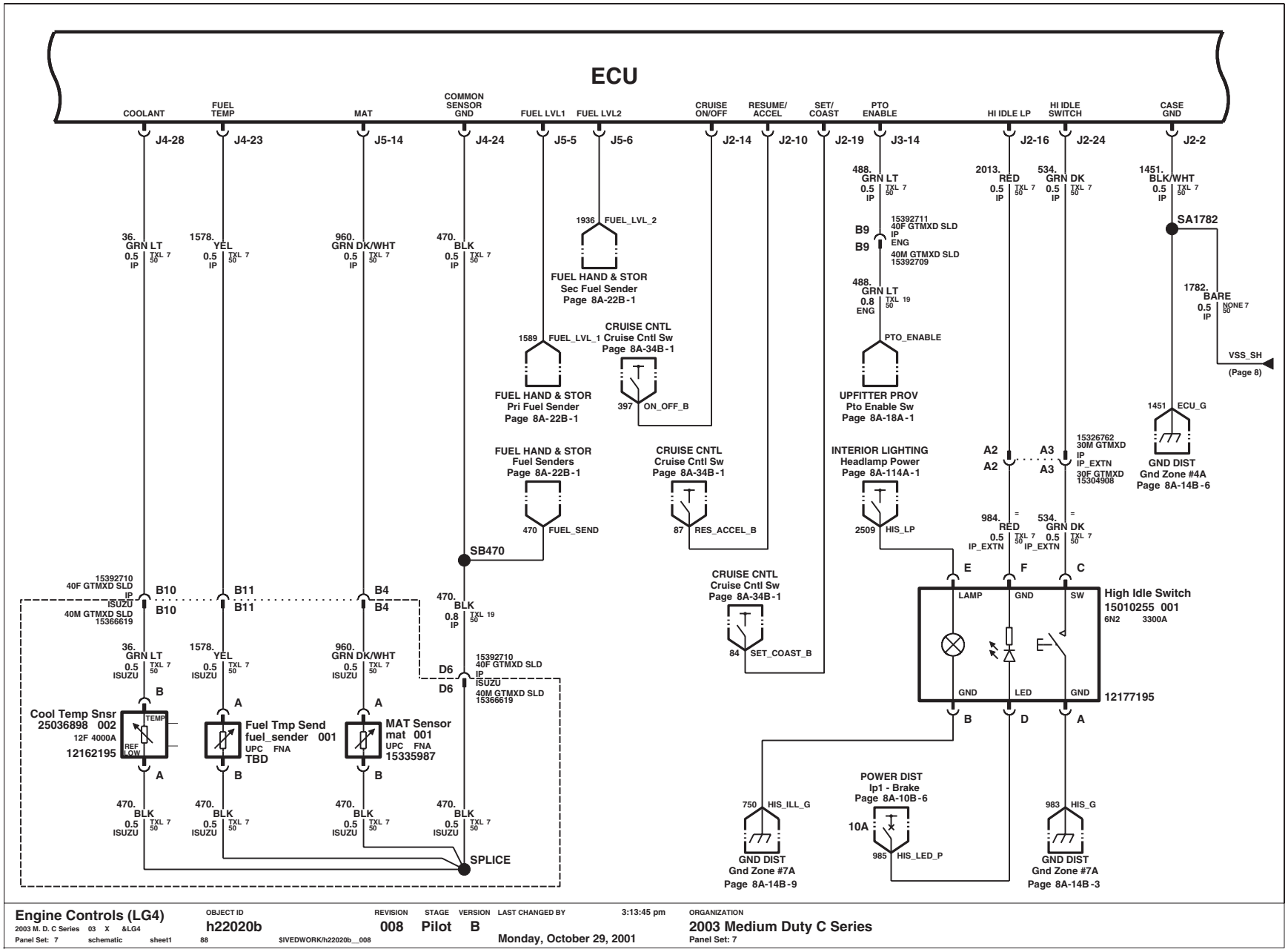
Engine Controls (LG4)
2003 M. D. C Series 03 X &LG4
Panel Set: 6 schematic sheet1 88

OBJECT ID: h22020b
$IVEDWORK/h22020b__008

REVISION: 008
STAGE: Pilot
VERSION: B
LAST CHANGED BY:
3:13:45 pm
Monday, October 29, 2001

ORGANIZATION
2003 Medium Duty C Series
Panel Set: 6

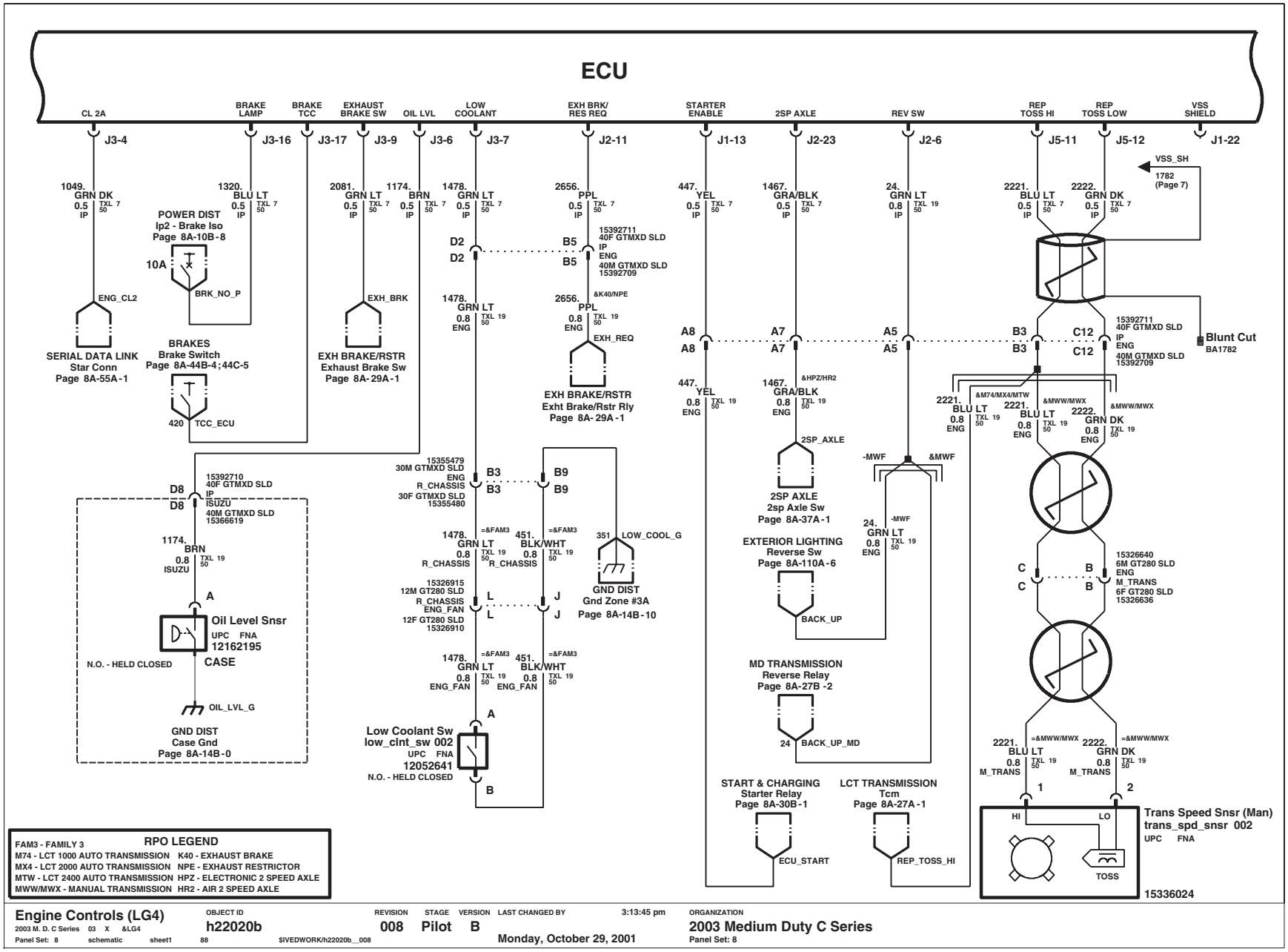
Engine Controls — (LG4-'03-'04) 7.8L-Diesel/Duramax



Engine Controls (LG4)
2003 M. D. C Series 03 X &LG4
Panel Set: 7 schematic sheet1 88

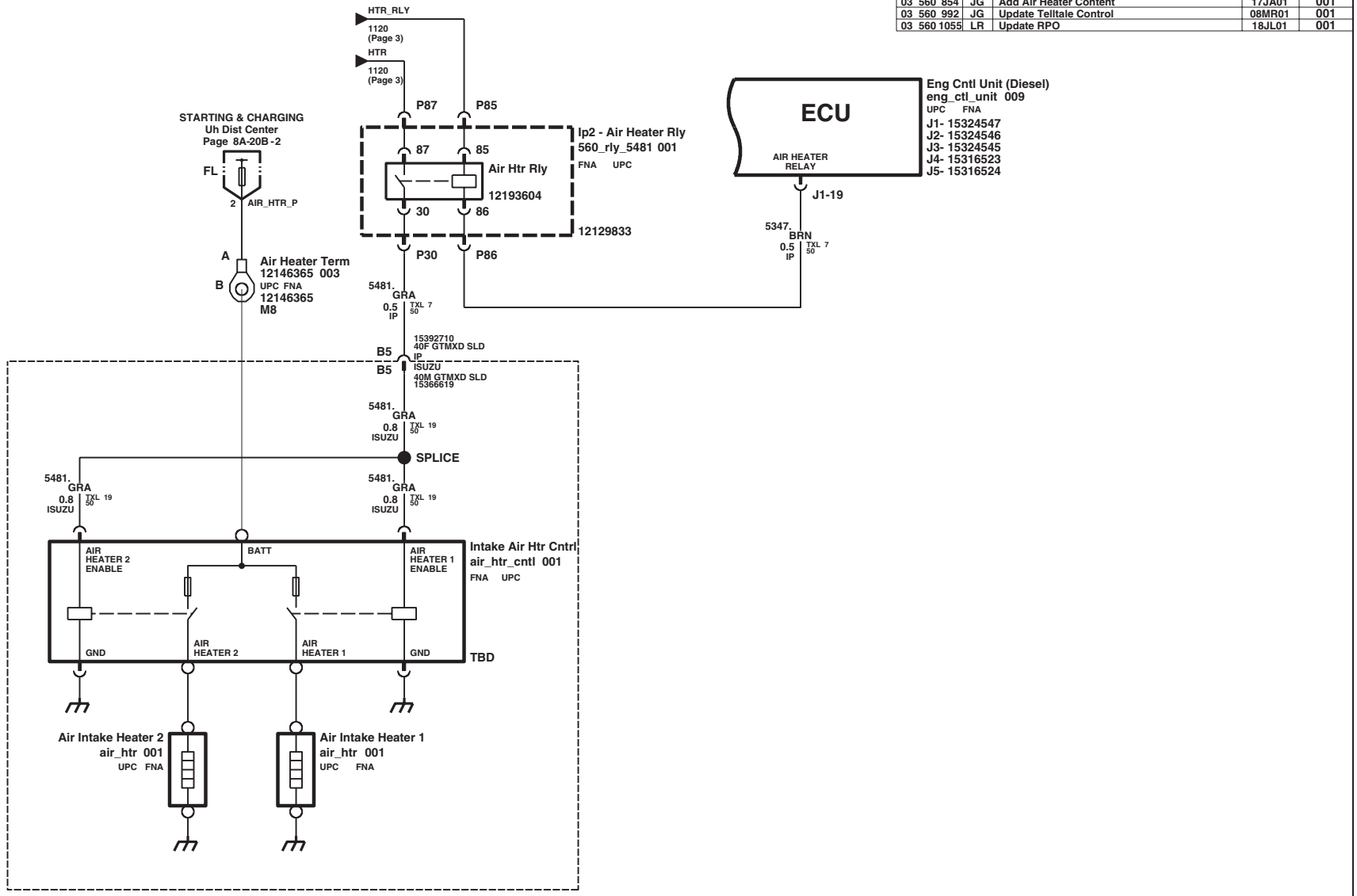
OBJECT ID: h22020b
REVISION: 008
STAGE: Pilot
VERSION: B
LAST CHANGED BY: SIVEDWORK/h22020b__008
3:13:45 pm Monday, October 29, 2001
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 7

Engine Controls — (LG4-'03-'04) 7.8L-Diesel/Duramax



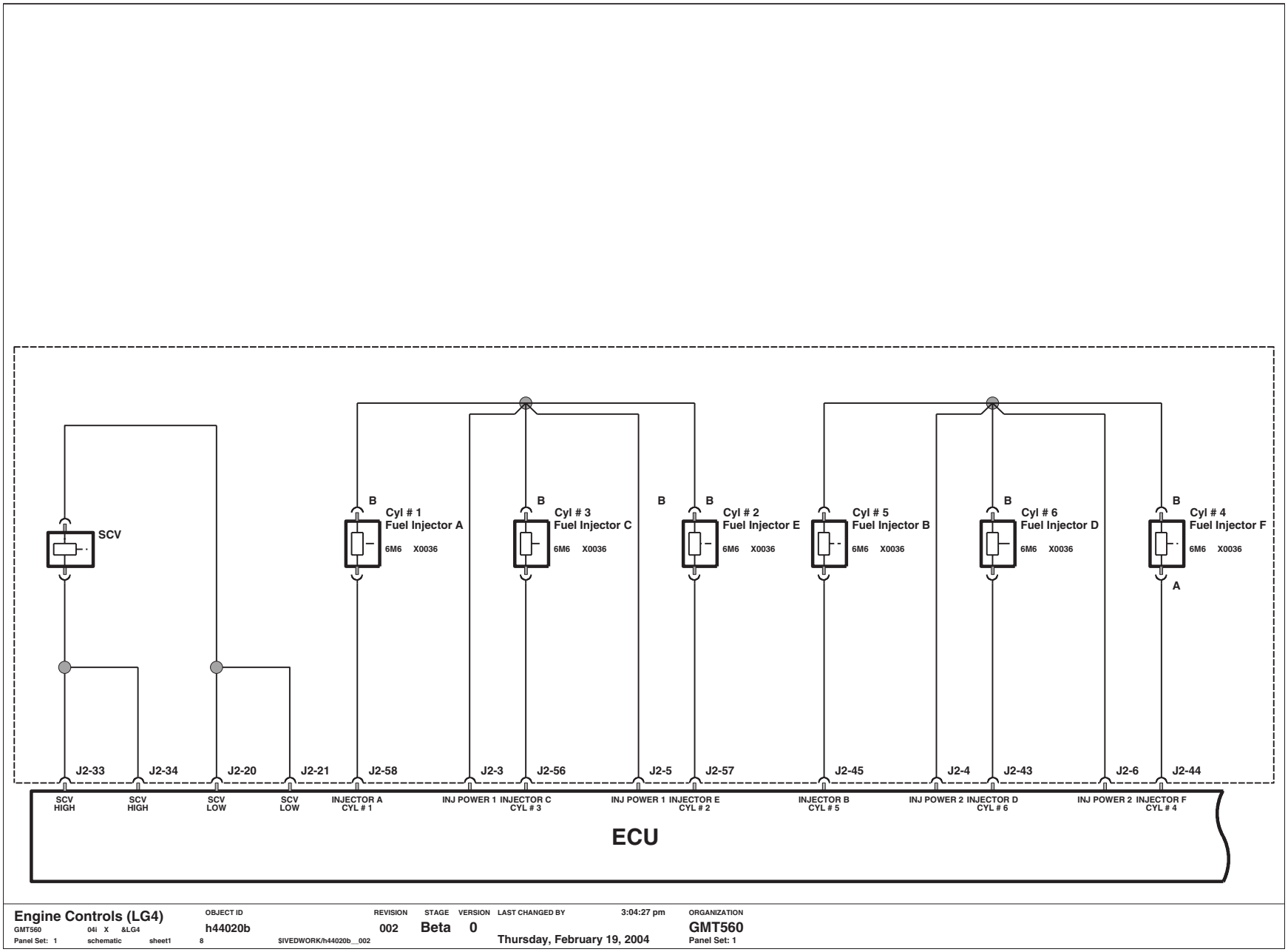
Engine Controls — (LG4-'03-'04) 7.8L-Diesel/Duramax

03 560 000	JG	PILOT B - INITIAL CREATION	27OC00	001
03 560 805	JG	Remove School Bus	27OC00	001
03 560 839	JG	Inline Update	21DE00	001
03 560 854	JG	Add Air Heater Content	17JA01	001
03 560 992	JG	Update Telltale Control	08MR01	001
03 560 1055	LR	Update RPO	18JL01	001

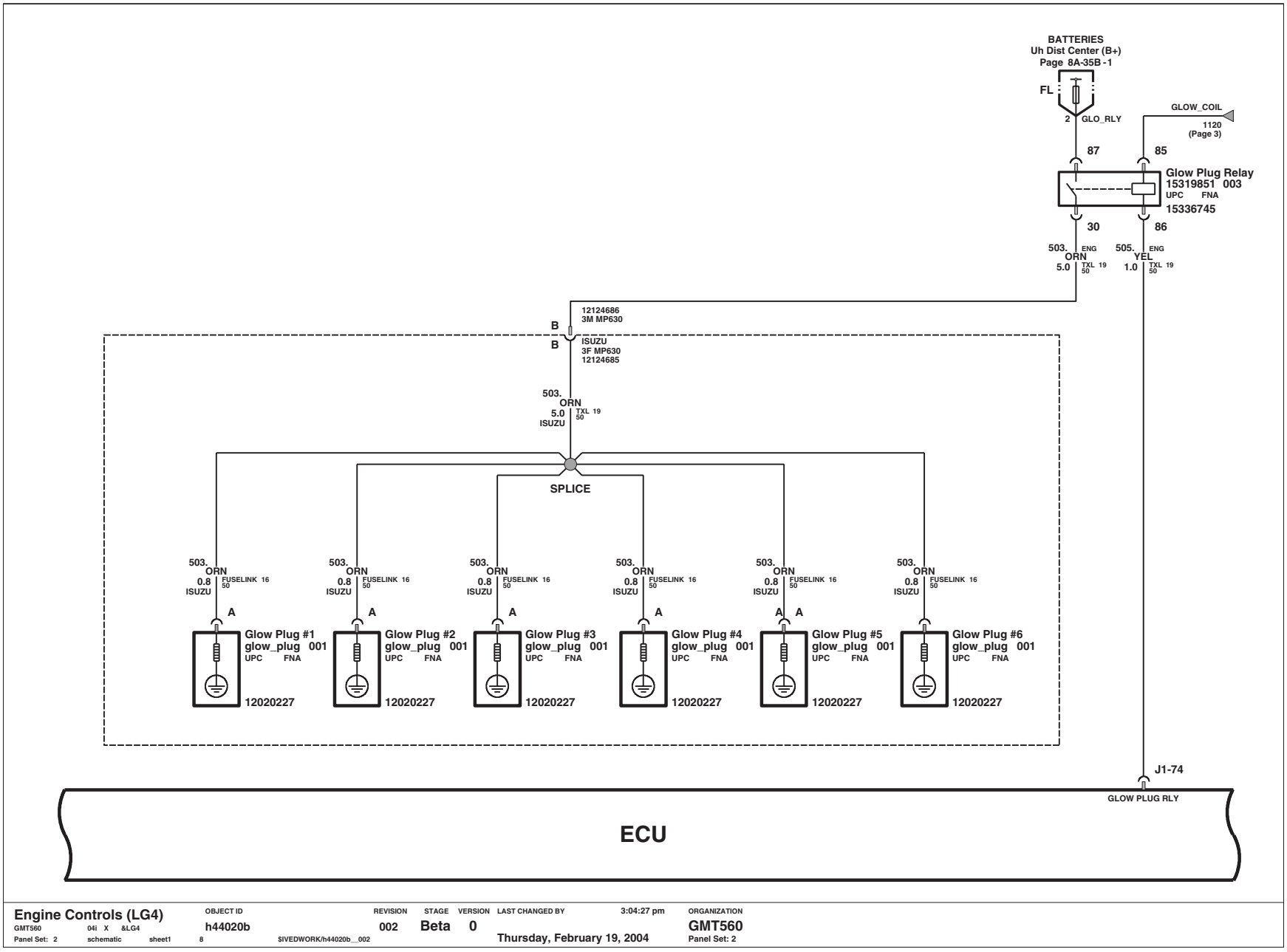


Engine Controls (LG4)	OBJECT ID		REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION	
2003 M. D. C Series 03 X &LG4	**h22020b**		**008**	**Pilot**	**B**		3:13:45 pm	**2003 Medium Duty C Series**	
Panel Set: 9 schematic sheet1 88	$IVEDWORK/h22020b__008					**Monday, October 29, 2001**		Panel Set: 9	

Engine Controls — (LG4-'04i) 7.8L-Diesel/Duramax

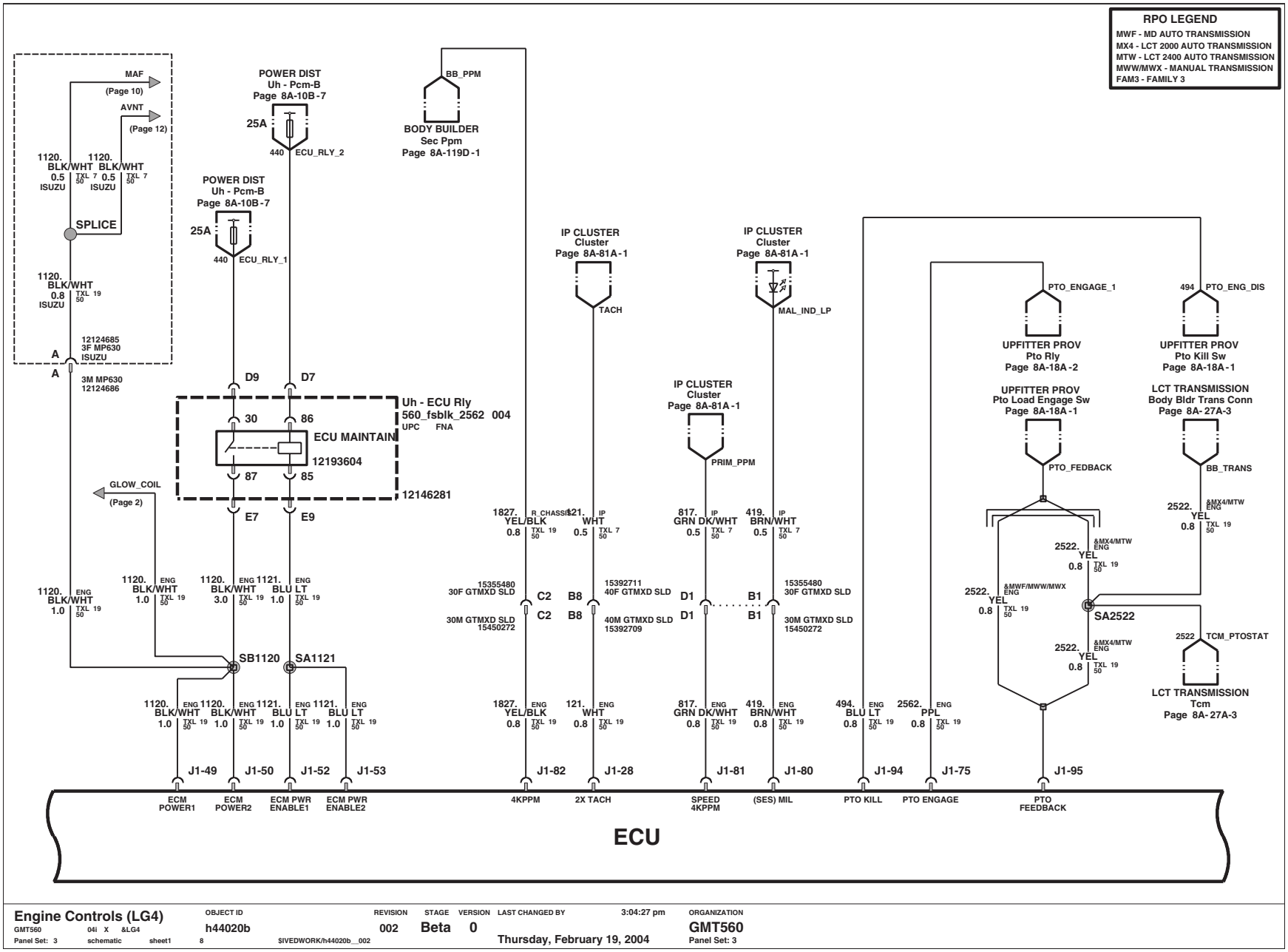


Engine Controls — (LG4-'04i) 7.8L-Diesel/Duramax

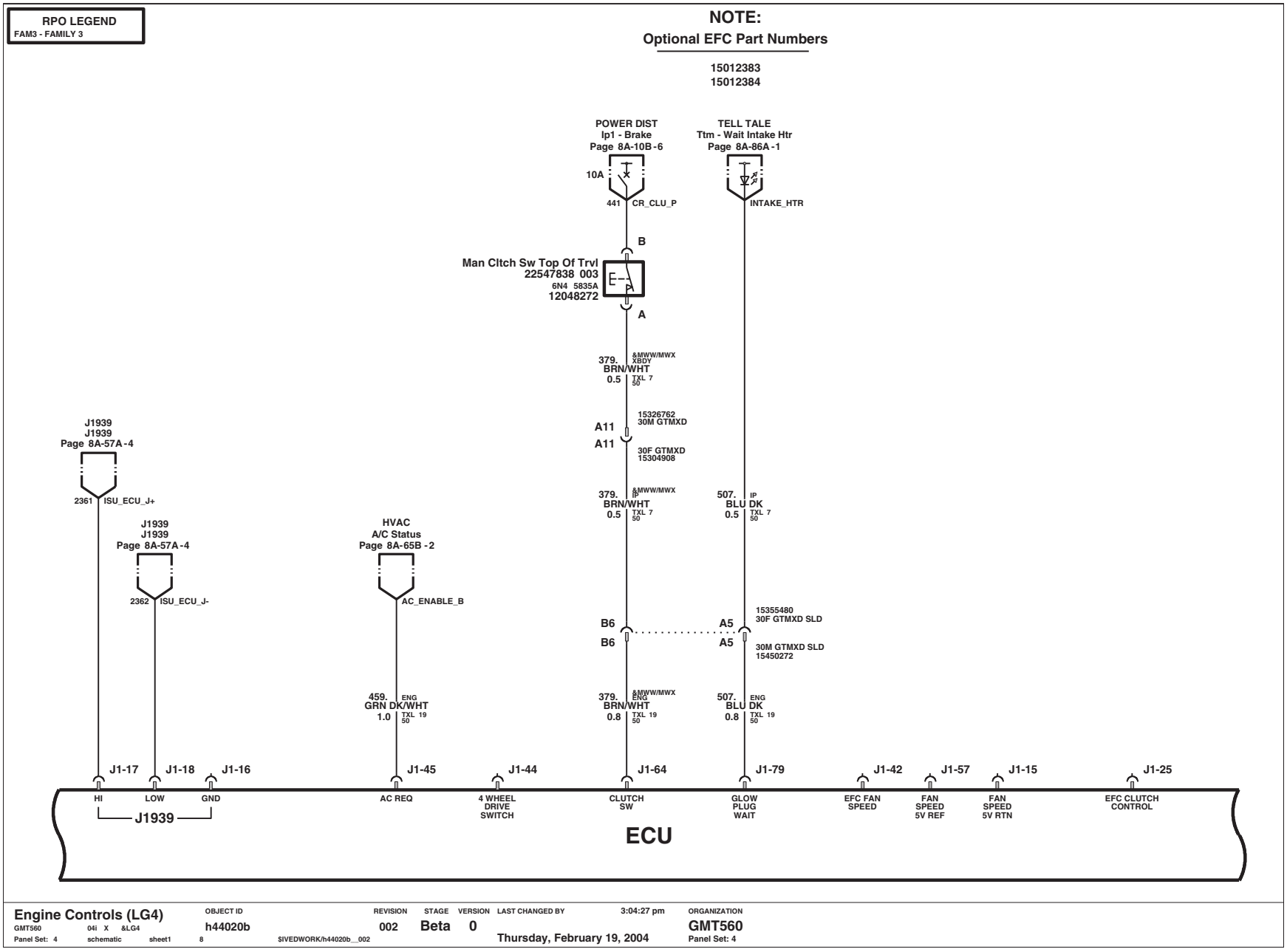


Engine Controls (LG4)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
GMT560 04i X &LG4	h44020b	002	Beta	0		3:04:27 pm	GMT560
Panel Set: 2 schematic sheet1 8	$IVEDWORK/h44020b__002				Thursday, February 19, 2004		Panel Set: 2

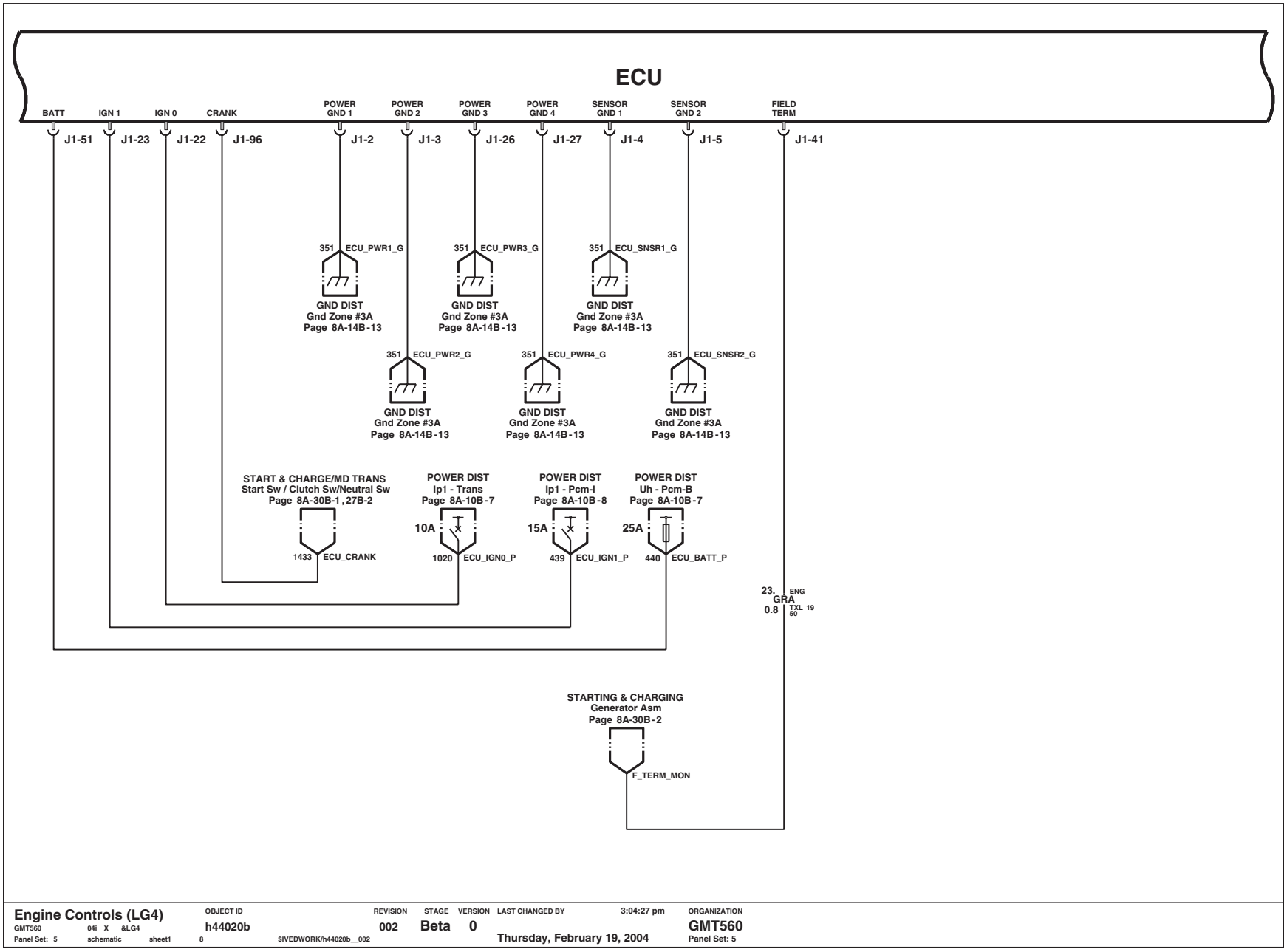
Engine Controls — (LG4-'04i) 7.8L-Diesel/Duramax



Engine Controls — (LG4-'04i) 7.8L-Diesel/Duramax



Engine Controls — (LG4-'04i) 7.8L-Diesel/Duramax



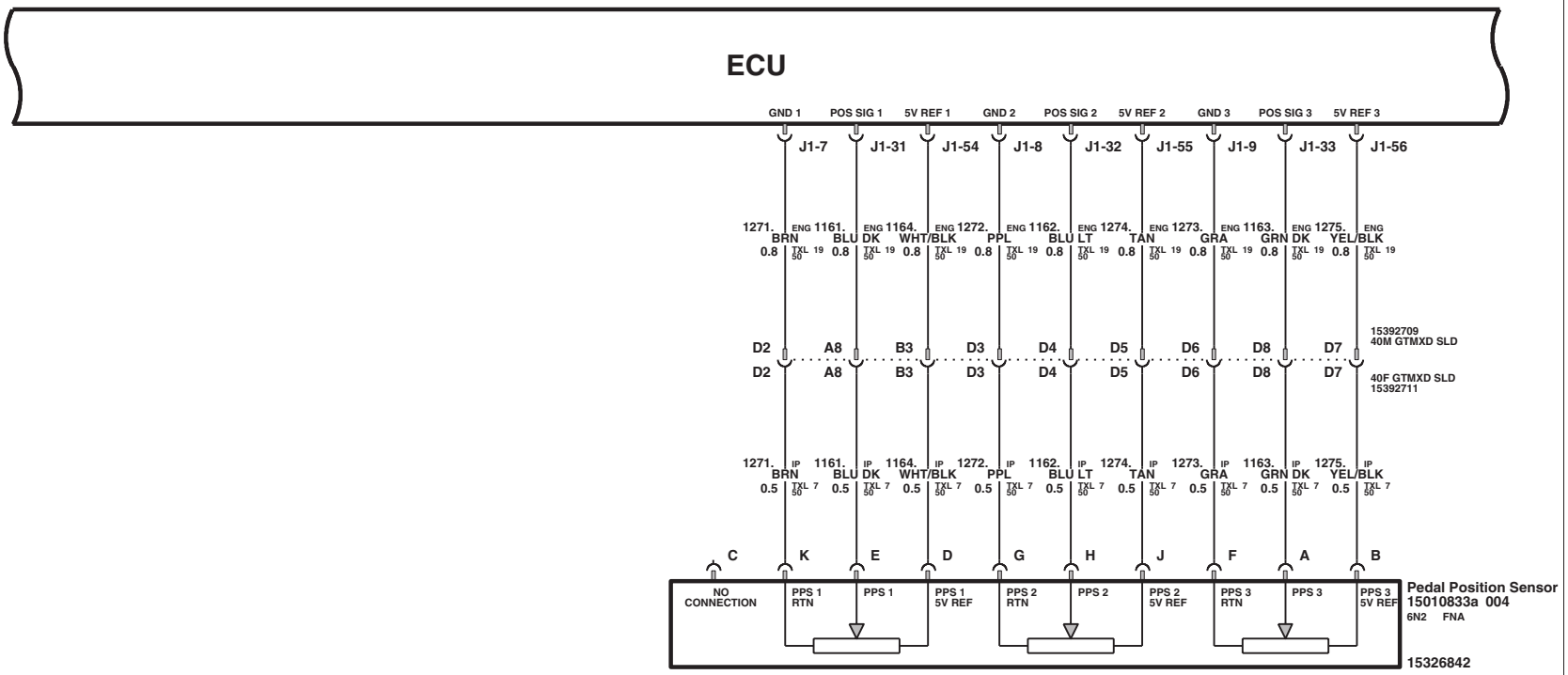
Engine Controls (LG4)

OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
h44020b	002	Beta	0		3:04:27 pm	GMT560

GMT560 04i X &LG4 — Panel Set: 5 — schematic — sheet1 — 8 — $IVEDWORK/h44020b__002

Thursday, February 19, 2004 — Panel Set: 5

Engine Controls — (LG4-'04i) 7.8L-Diesel/Duramax

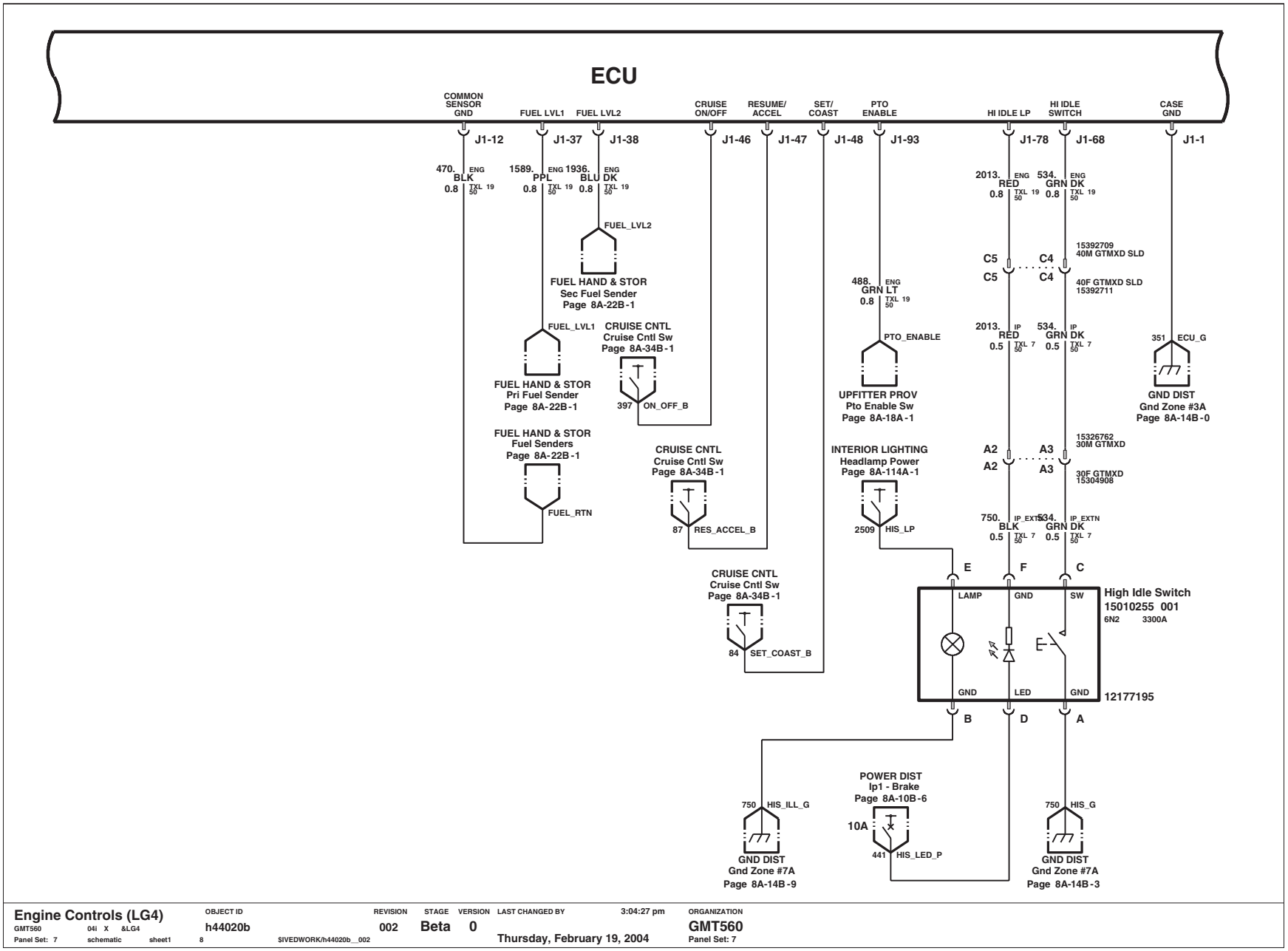


Engine Controls (LG4)
GMT560 04i X &LG4
Panel Set: 6 schematic sheet1 8

OBJECT ID h44020b
REVISION 002
STAGE Beta
VERSION 0
LAST CHANGED BY
3:04:27 pm
Thursday, February 19, 2004
$IVEDWORK/h44020b__002

ORGANIZATION GMT560
Panel Set: 6

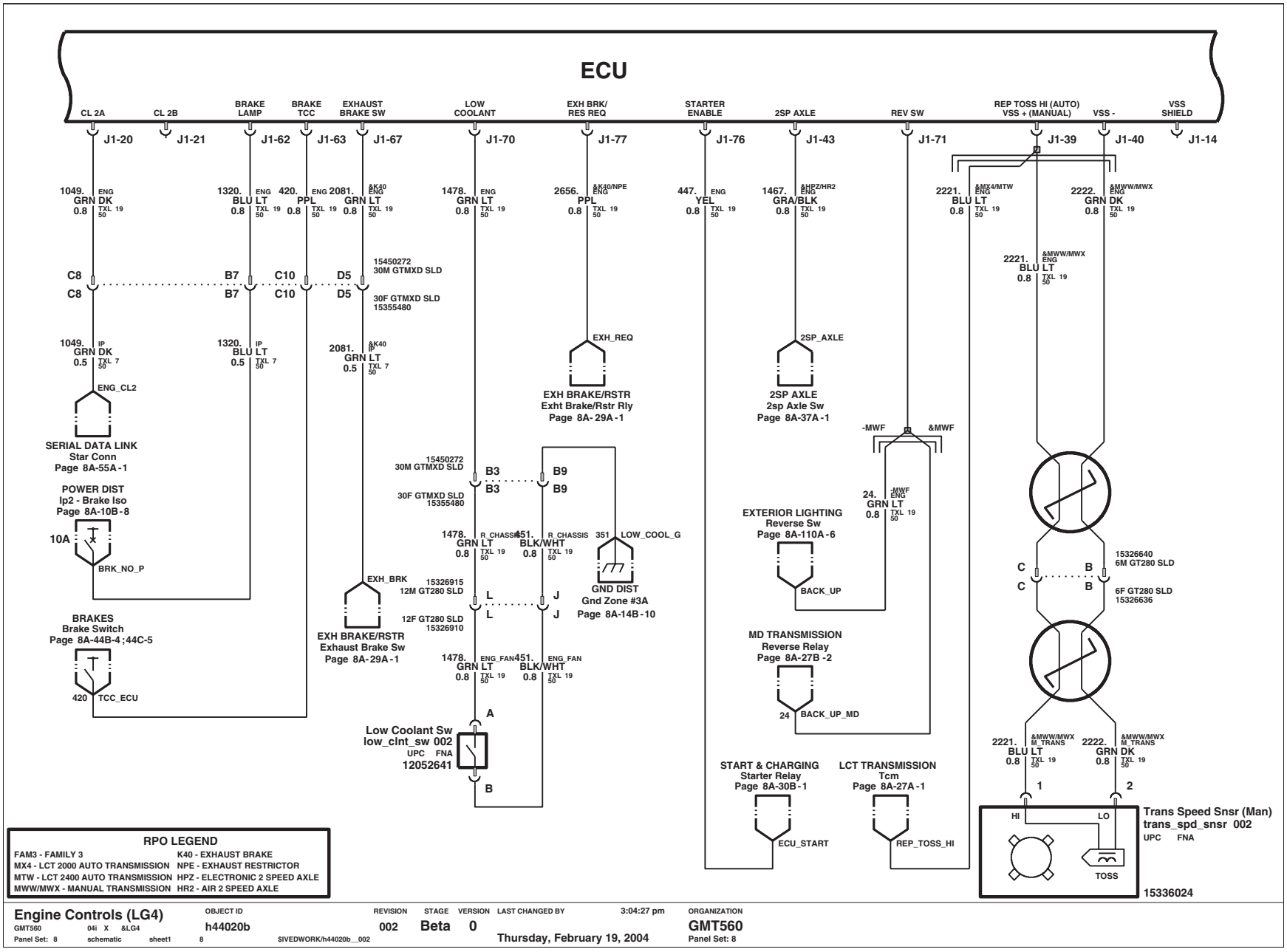
Engine Controls — (LG4-'04i) 7.8L-Diesel/Duramax



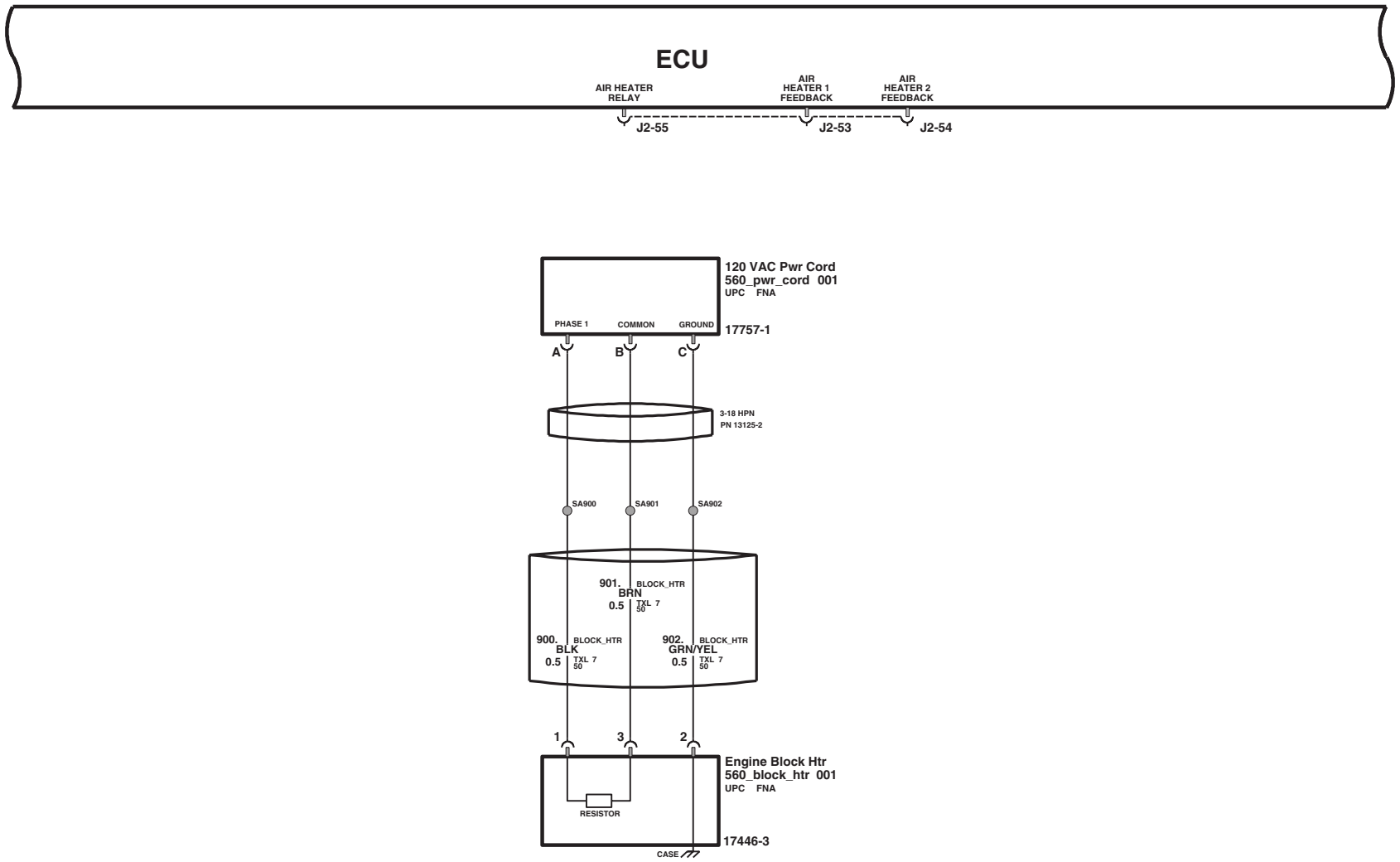
Engine Controls (LG4)
GMT560 04i X &LG4
Panel Set: 7 schematic sheet1 8

OBJECT ID: h44020b
REVISION: 002
STAGE: Beta
VERSION: 0
LAST CHANGED BY: $IVEDWORK/h44020b__002
3:04:27 pm
Thursday, February 19, 2004
ORGANIZATION: GMT560
Panel Set: 7

Engine Controls — (LG4-'04i) 7.8L-Diesel/Duramax



Engine Controls — (LG4-'04i) 7.8L-Diesel/Duramax



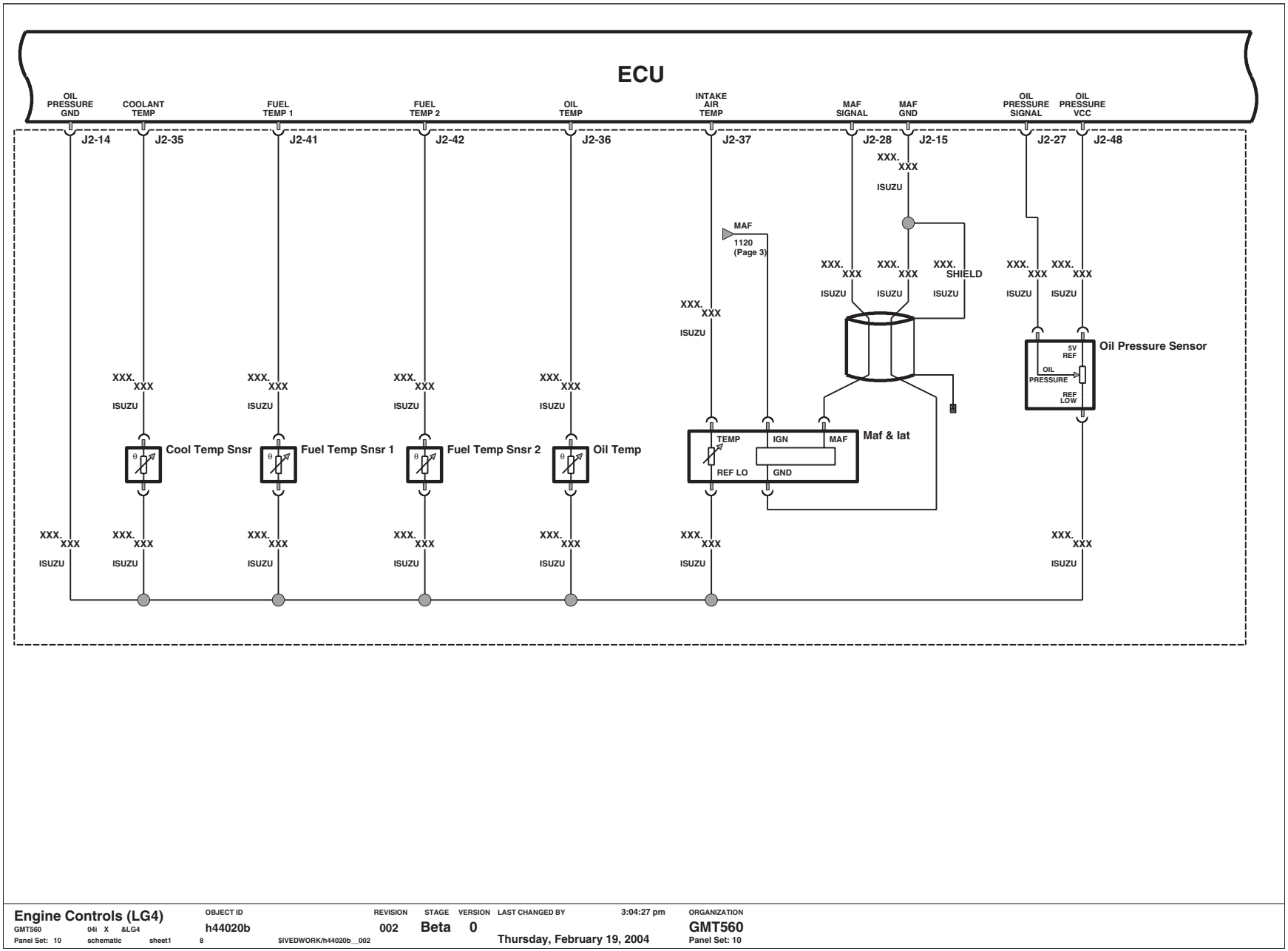
Engine Controls (LG4)
GMT560 04i X &LG4
Panel Set: 9 schematic sheet1 8

OBJECT ID h44020b
$IVEDWORK/h44020b__002

REVISION 002
STAGE Beta
VERSION 0
LAST CHANGED BY
3:04:27 pm
Thursday, February 19, 2004

ORGANIZATION GMT560
Panel Set: 9

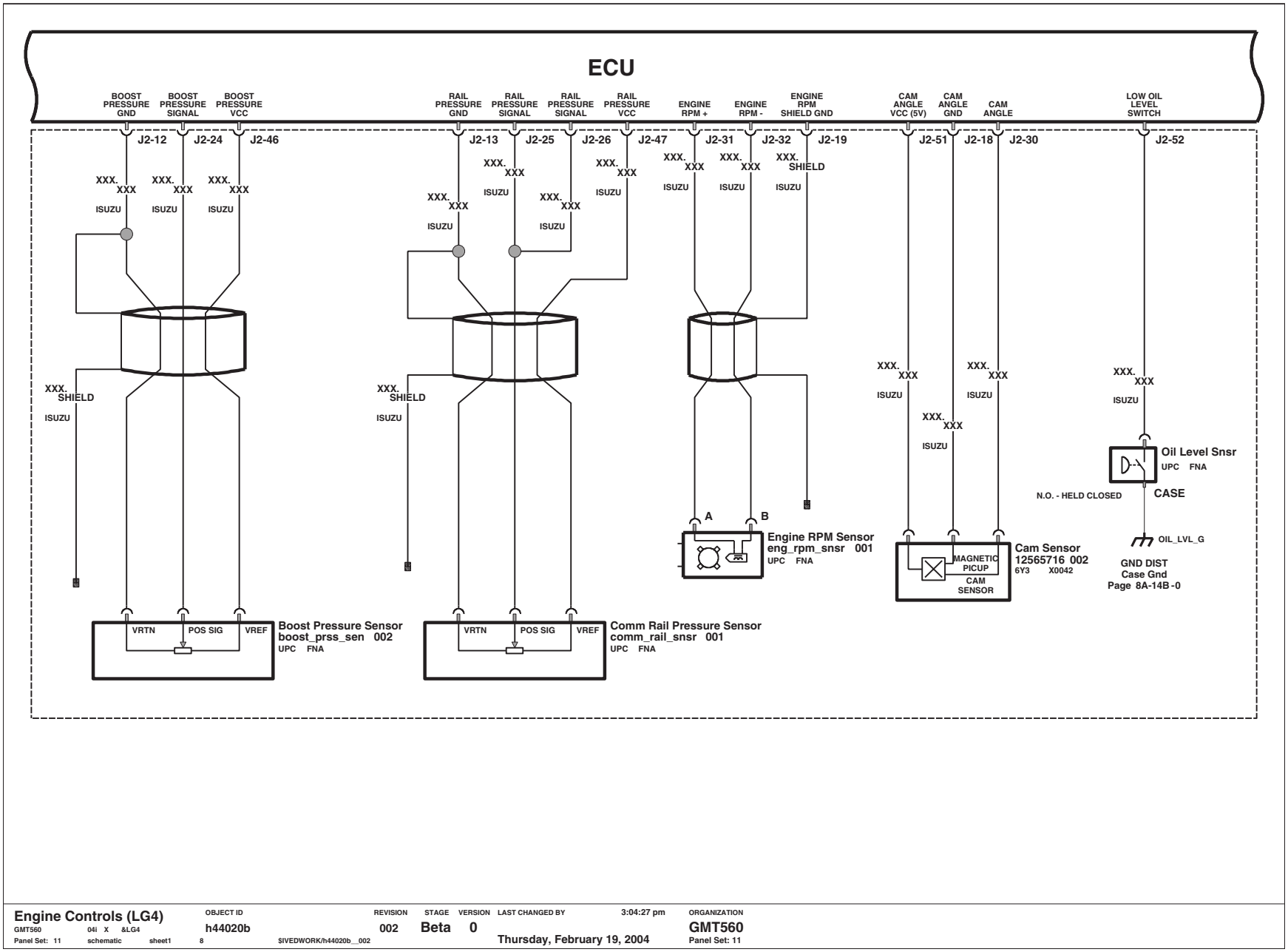
Engine Controls — (LG4-'04i) 7.8L-Diesel/Duramax



Engine Controls (LG4)
GMT560 04i X &LG4
Panel Set: 10 schematic sheet1 8

OBJECT ID h44020b
REVISION 002
STAGE Beta
VERSION 0
LAST CHANGED BY
3:04:27 pm Thursday, February 19, 2004
ORGANIZATION GMT560
Panel Set: 10
$IVEDWORK/h44020b__002

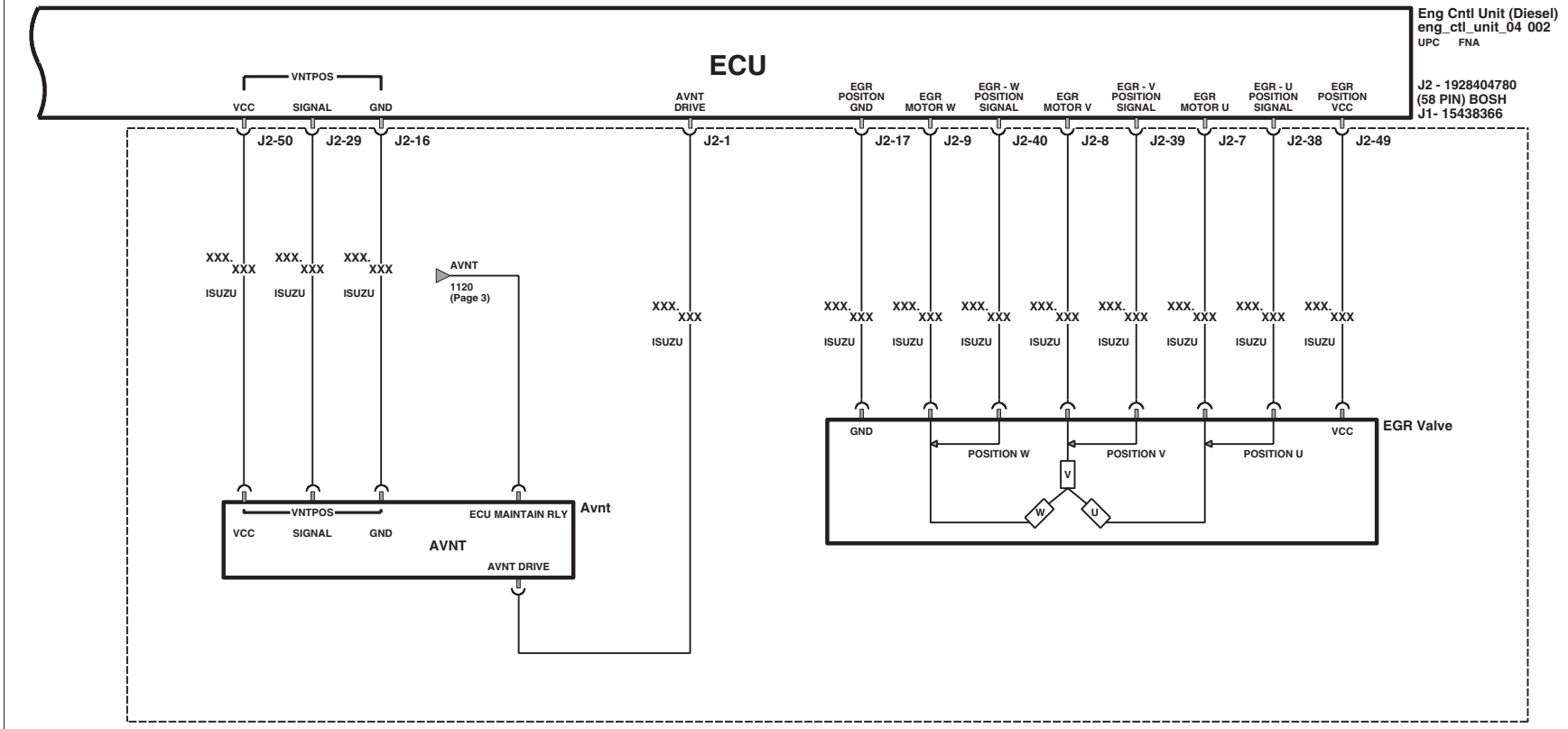
Engine Controls — (LG4-'04i) 7.8L-Diesel/Duramax



Engine Controls (LG4) | OBJECT ID h44020b | REVISION 002 | STAGE Beta | VERSION 0 | LAST CHANGED BY | 3:04:27 pm | ORGANIZATION GMT560
GMT560 04i X &LG4 | Panel Set: 11 schematic sheet1 8 $IVEDWORK/h44020b__002 | Thursday, February 19, 2004 | Panel Set: 11

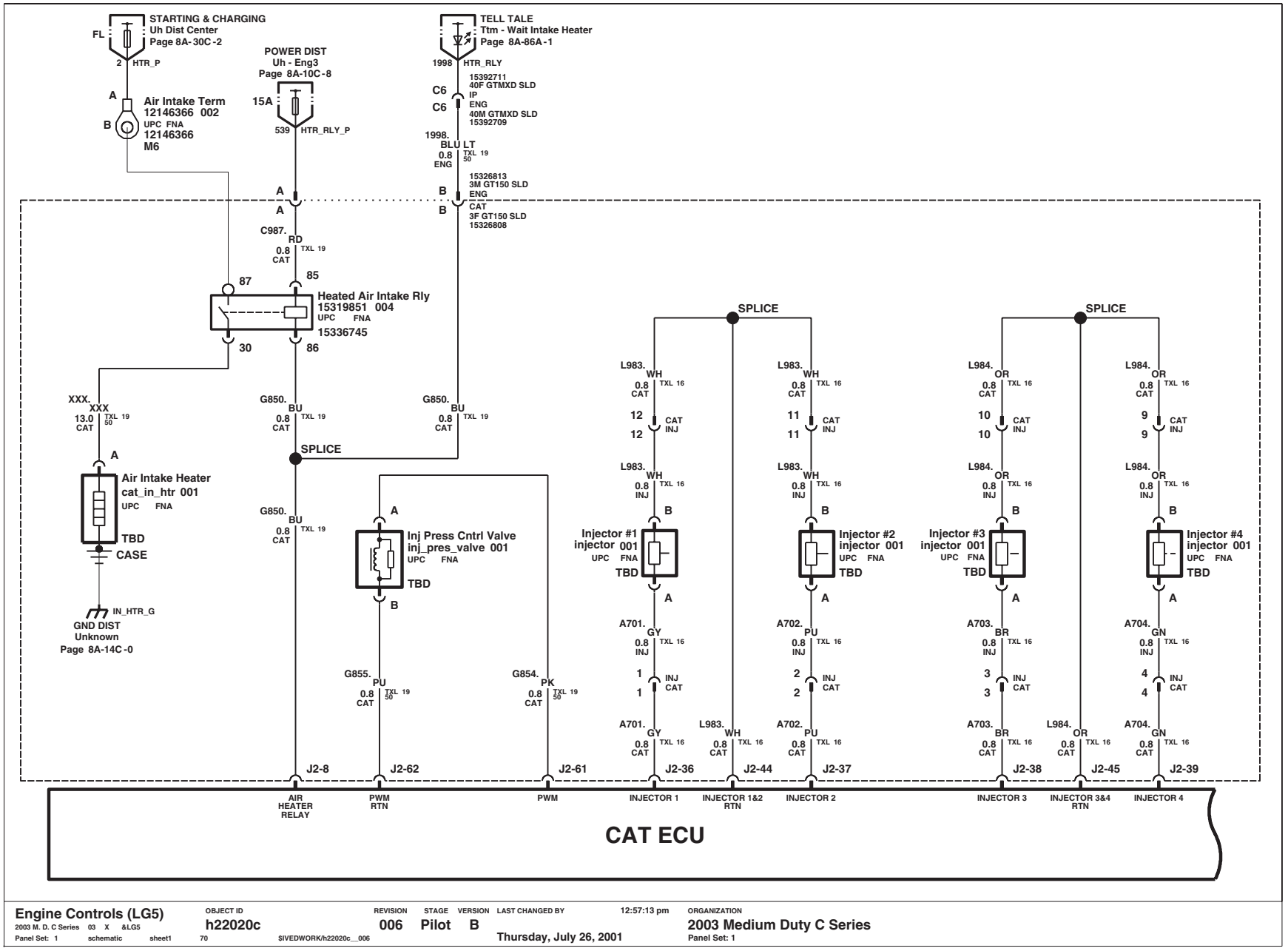
Engine Controls — (LG4-'04i) 7.8L-Diesel/Duramax

04 560 000	JG	Beta - Initial Creation	27AU01	001	04 560 1167	JG	For connector 15344628: pins A,B,C to 1,2,3	19FE02	001
					04 560 1179	JG	3-way Isuzu to Engine inline change	04MR02	001
					04i 560 1223	JG	LG4 - Fuse Rating Update	26AU02	001

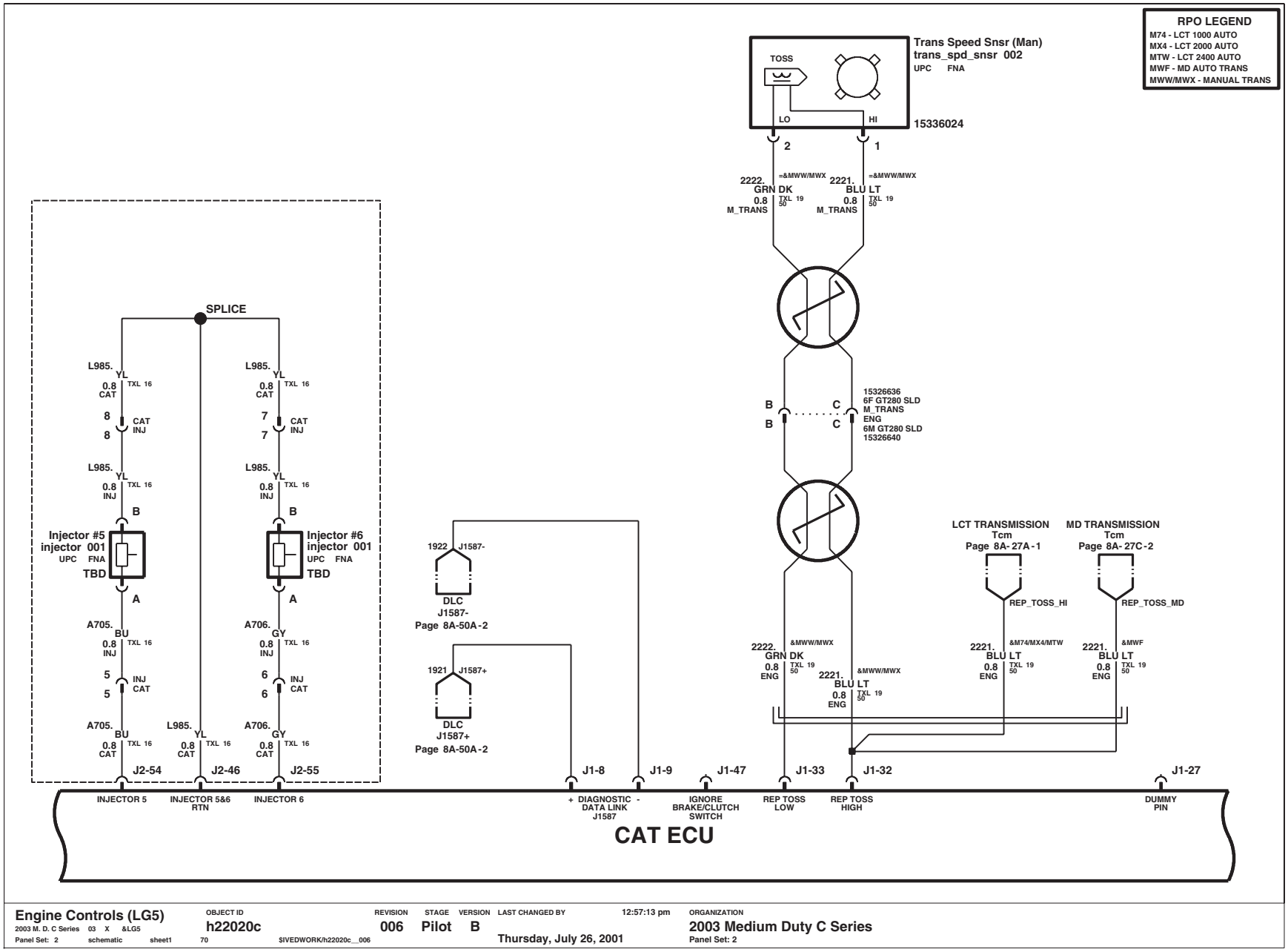


Engine Controls (LG4)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
GMT560 04i X &LG4	h44020b	002	Beta	0		3:04:27 pm	GMT560
Panel Set: 12 schematic sheet1 8	$IVEDWORK/h44020b__002				Thursday, February 19, 2004		Panel Set: 12

Engine Controls — (LG5) 7.2L-Diesel/CAT

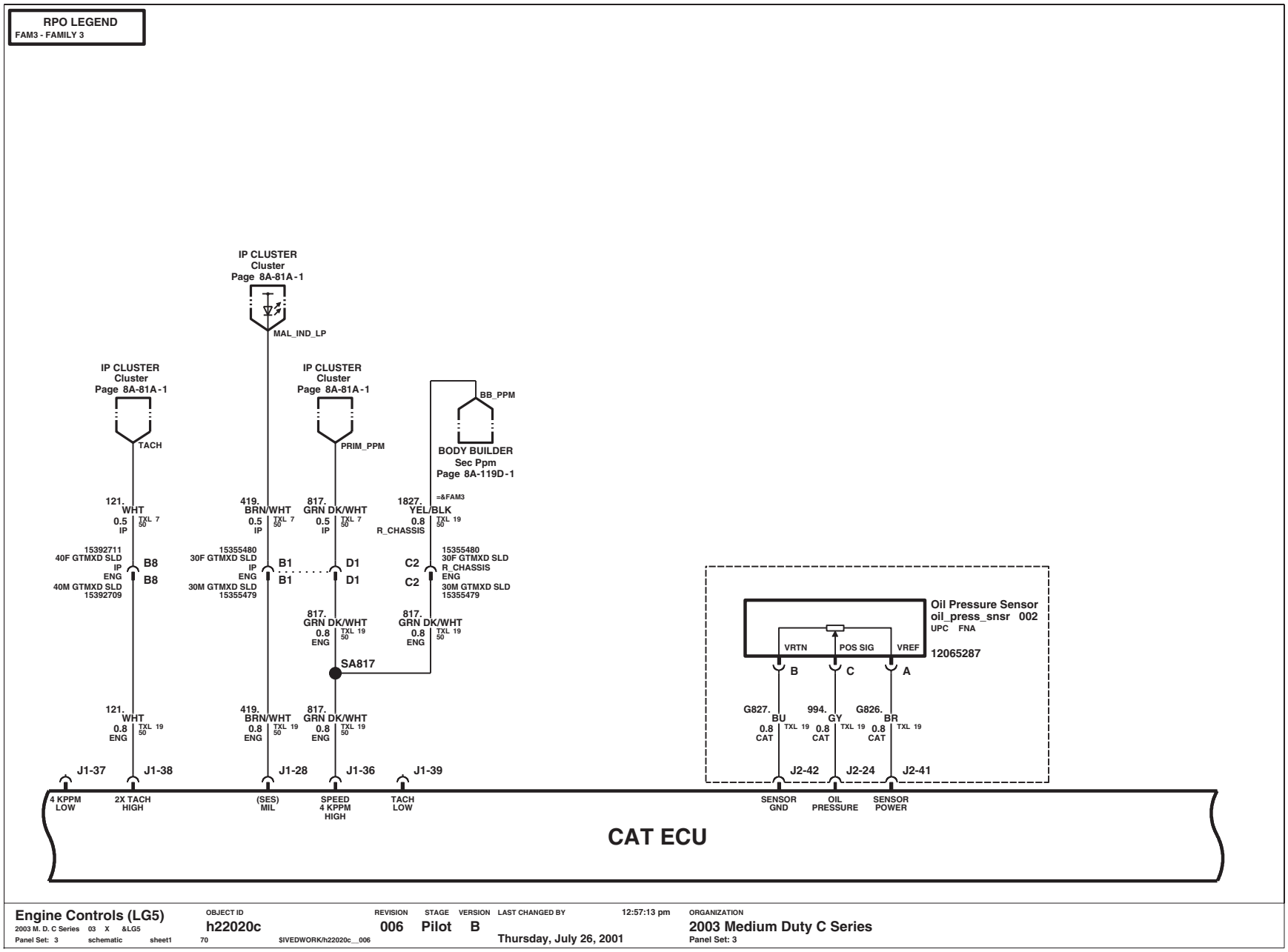


Engine Controls — (LG5) 7.2L-Diesel/CAT

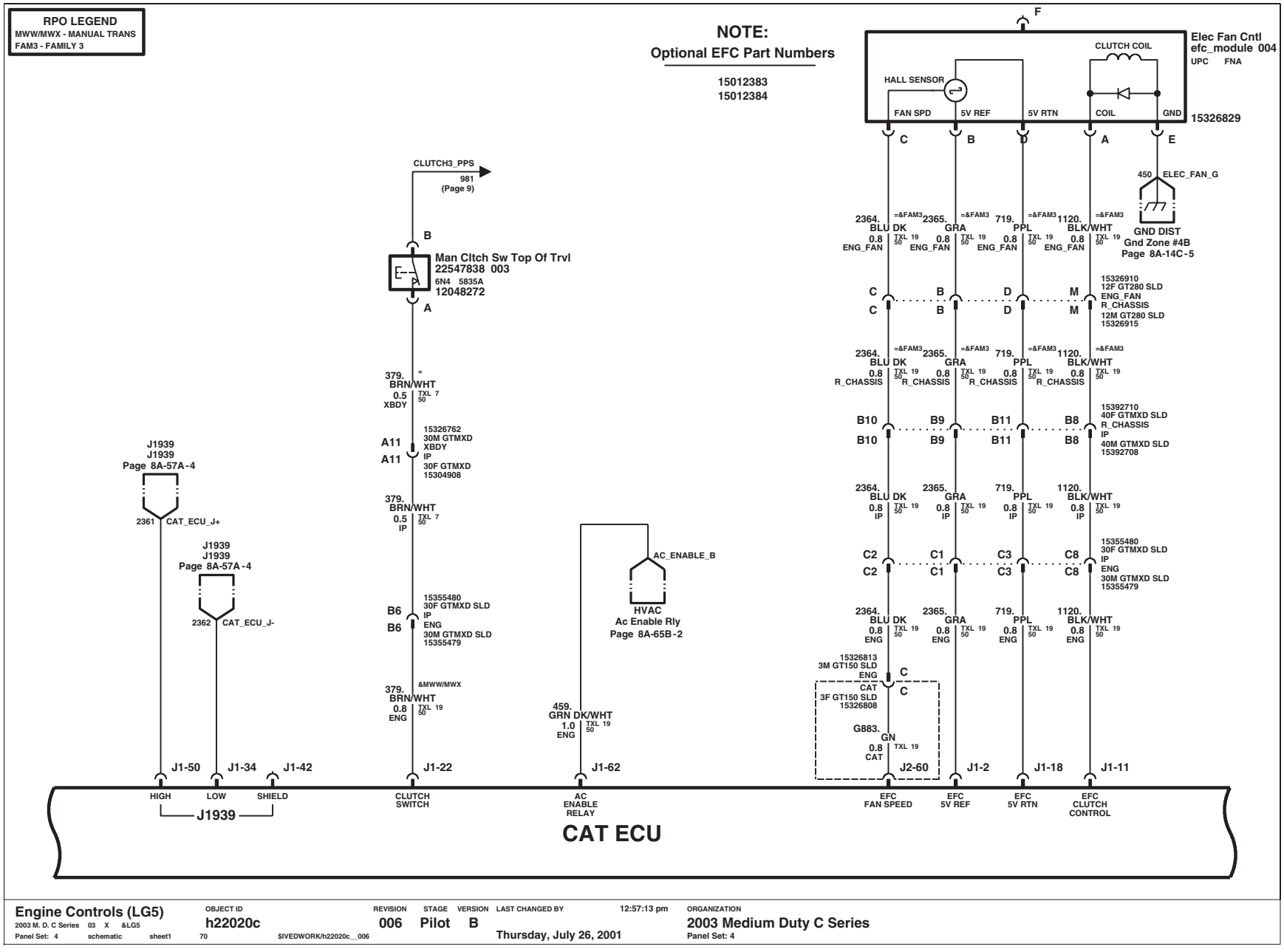


Engine Controls (LG5)	OBJECT ID		REVISION	STAGE	VERSION	LAST CHANGED BY	12:57:13 pm	ORGANIZATION
2003 M. D. C Series 03 X &LG5	**h22020c**		**006**	**Pilot**	**B**			**2003 Medium Duty C Series**
Panel Set: 2 schematic sheet1 70	$IVEDWORK/h22020c__006					**Thursday, July 26, 2001**		Panel Set: 2

Engine Controls — (LG5) 7.2L-Diesel/CAT



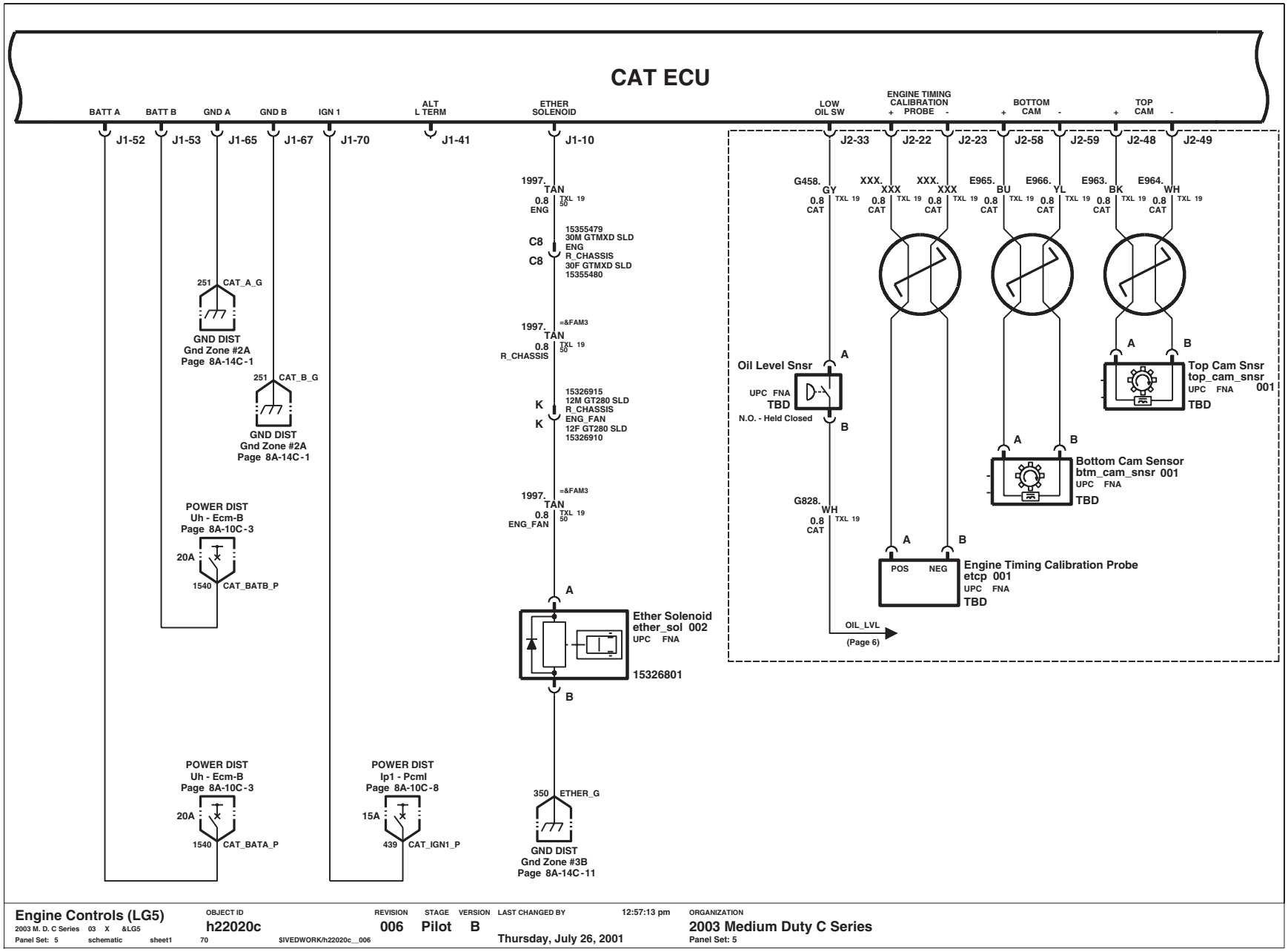
Engine Controls — (LG5) 7.2L-Diesel/CAT



Engine Controls (LG5)
2003 M. D. C Series 03 X &LG5
Panel Set: 4 schematic sheet1 70 $IVEDWORK/h22020c__006

OBJECT ID: h22020c
REVISION: 006
STAGE: Pilot
VERSION: B
LAST CHANGED BY:
12:57:13 pm
Thursday, July 26, 2001
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 4

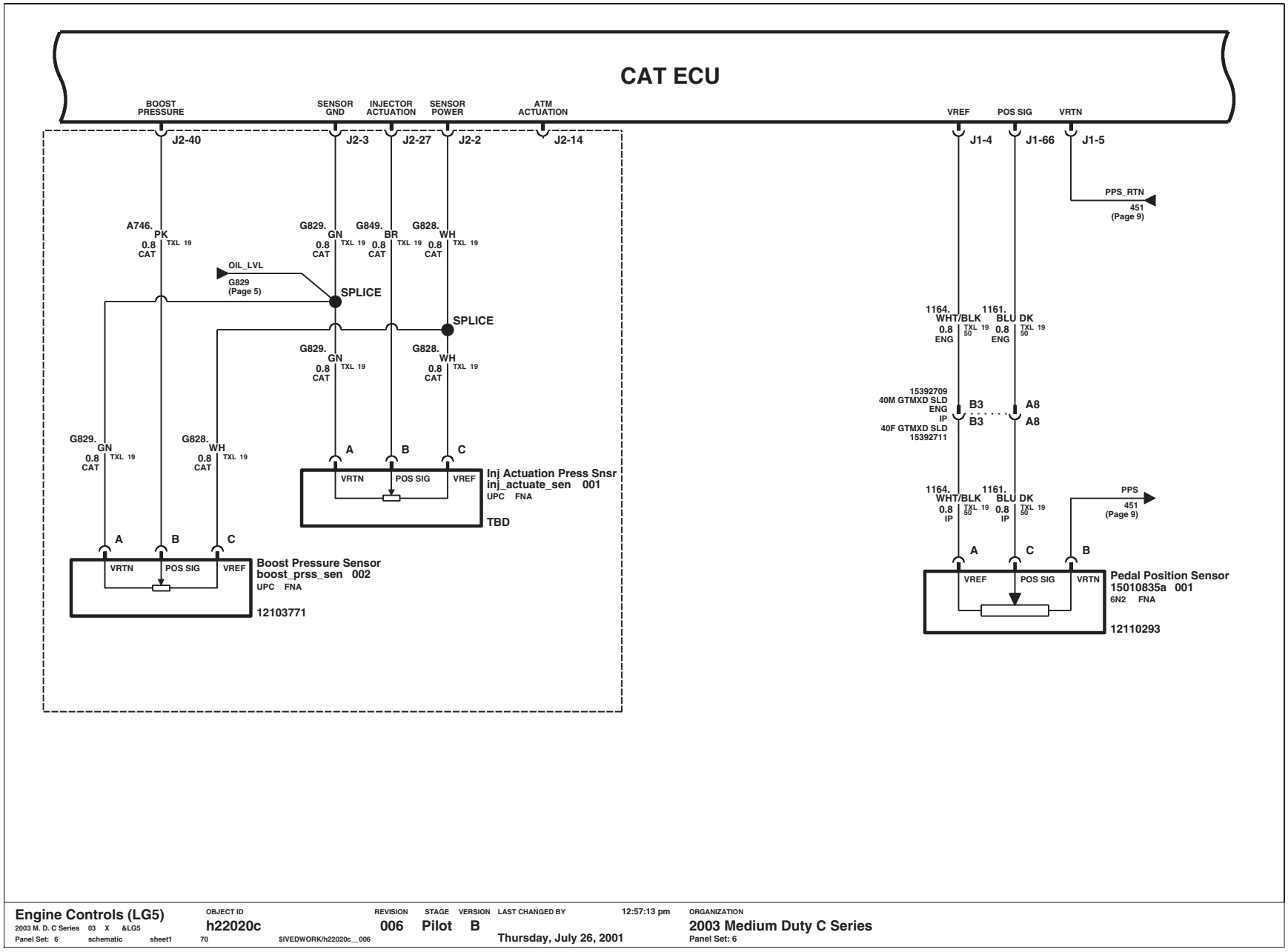
Engine Controls — (LG5) 7.2L-Diesel/CAT



Engine Controls (LG5) | OBJECT ID h22020c | REVISION 006 | STAGE Pilot | VERSION B | LAST CHANGED BY | 12:57:13 pm Thursday, July 26, 2001 | ORGANIZATION 2003 Medium Duty C Series

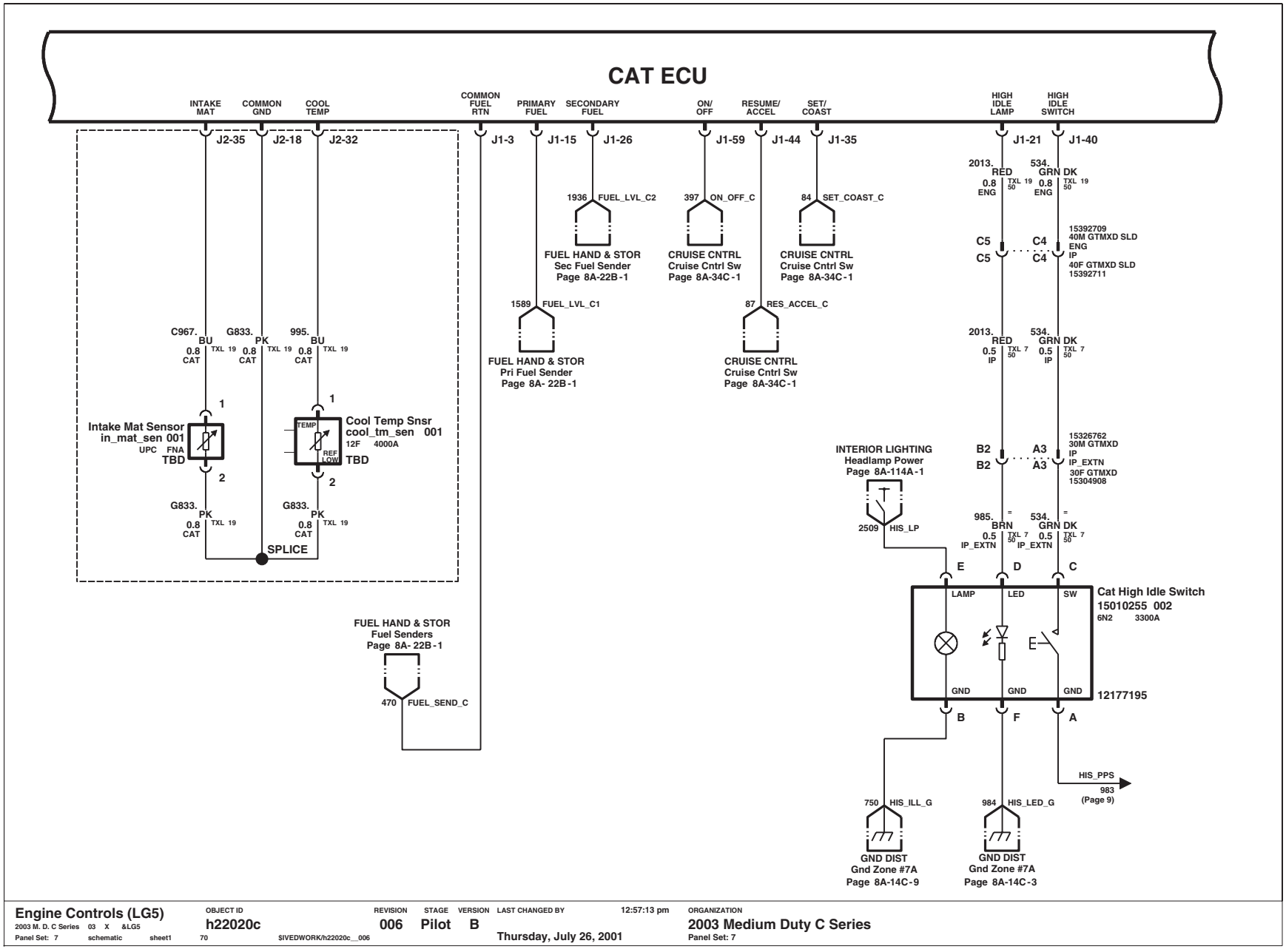
2003 M. D. C Series 03 X &LG5 | Panel Set: 5 | schematic | sheet1 | 70 | $IVEDWORK/h22020c__006 | Panel Set: 5

Engine Controls — (LG5) 7.2L-Diesel/CAT



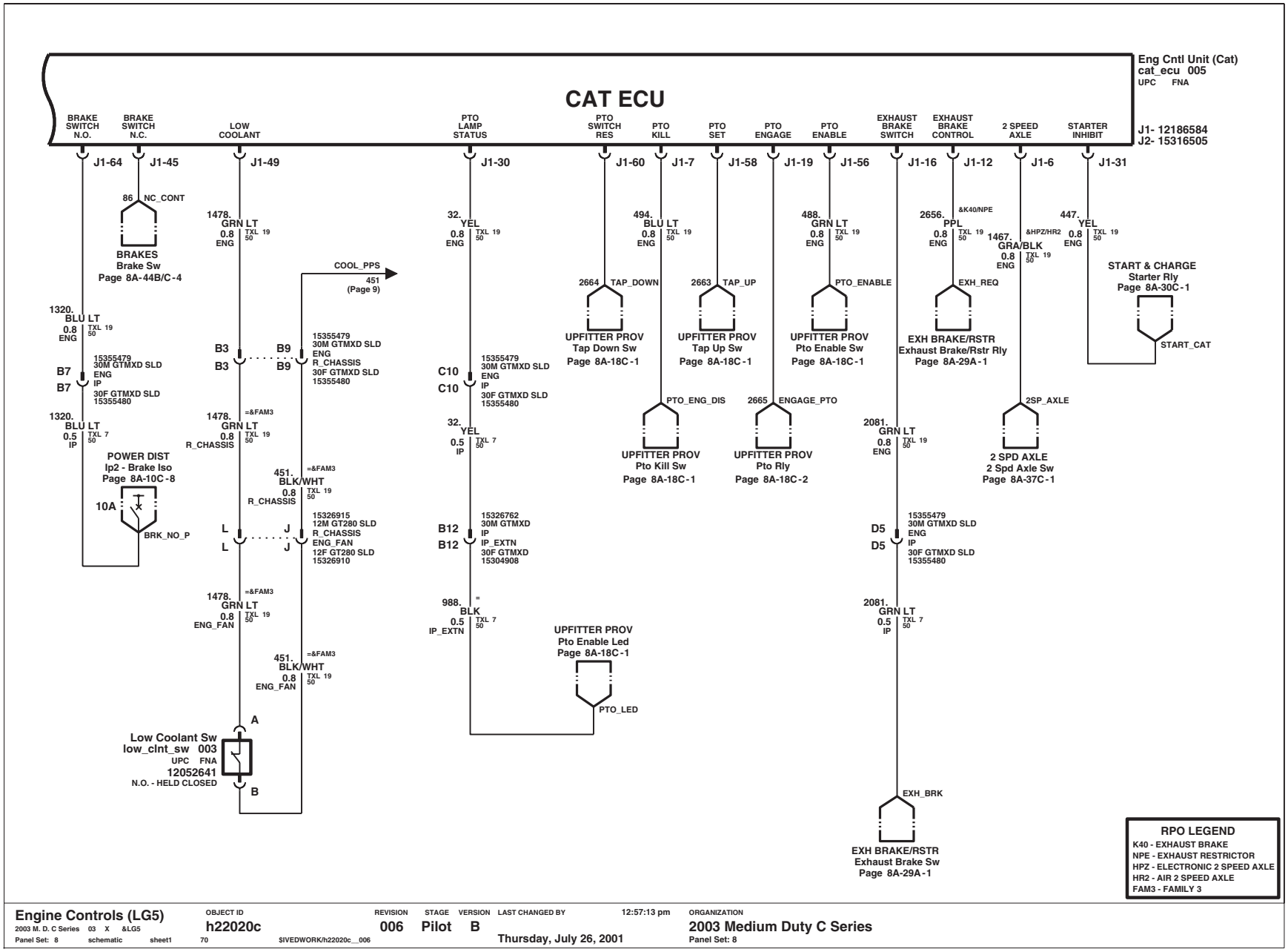
Engine Controls (LG5)	OBJECT ID		REVISION	STAGE	VERSION	LAST CHANGED BY	12:57:13 pm	ORGANIZATION
2003 M. D. C Series 03 X &LG5	**h22020c**		**006**	**Pilot**	**B**			**2003 Medium Duty C Series**
Panel Set: 6 schematic sheet1 70	$IVEDWORK/h22020c__006					**Thursday, July 26, 2001**		Panel Set: 6

Engine Controls — (LG5) 7.2L-Diesel/CAT

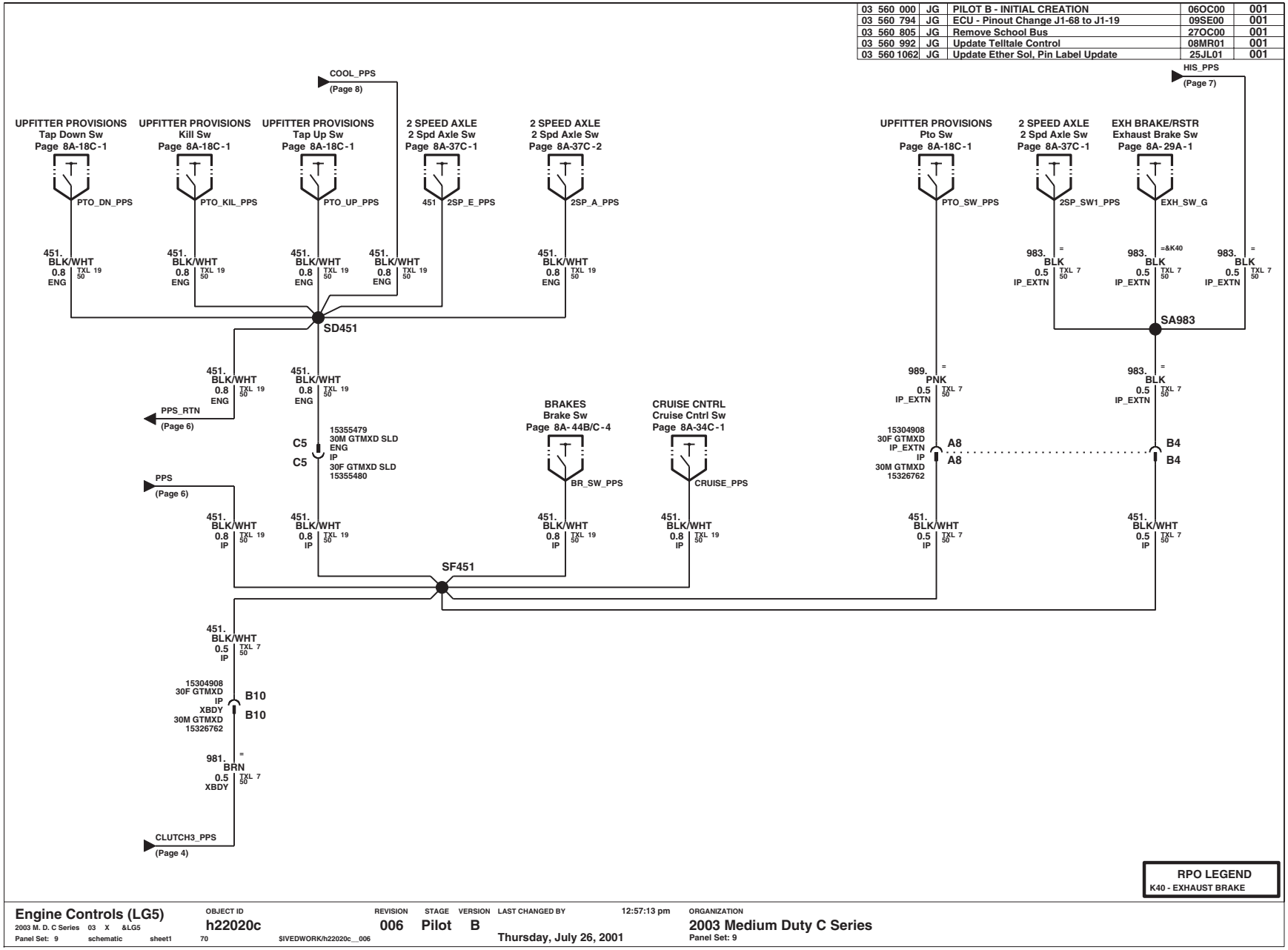


Engine Controls (LG5)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X &LG5	h22020c	006	Pilot	B		12:57:13 pm	2003 Medium Duty C Series
Panel Set: 7 schematic sheet1 70 $IVEDWORK/h22020c__006					Thursday, July 26, 2001		Panel Set: 7

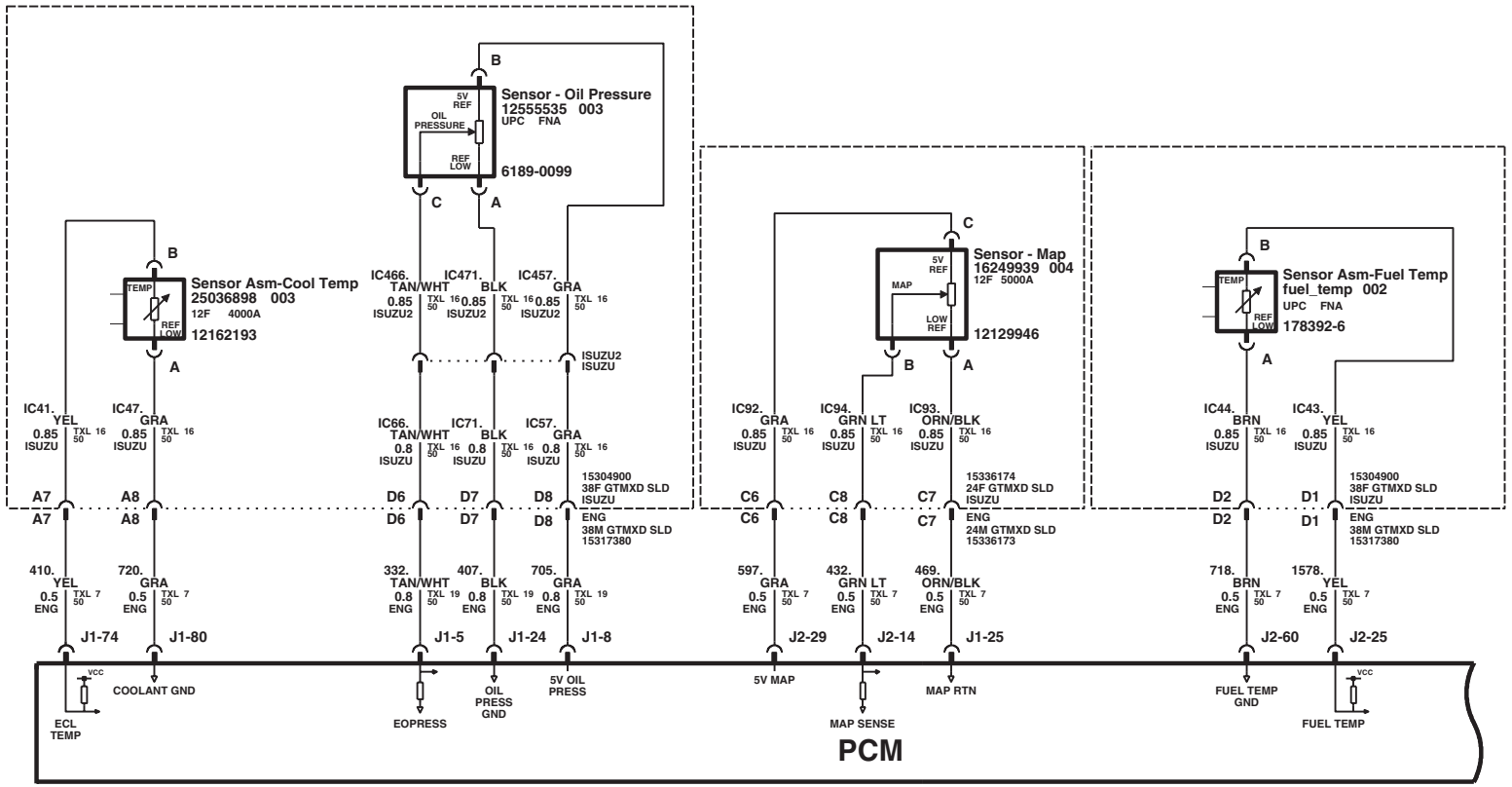
Engine Controls — (LG5) 7.2L-Diesel/CAT



Engine Controls — (LG5) 7.2L-Diesel/CAT

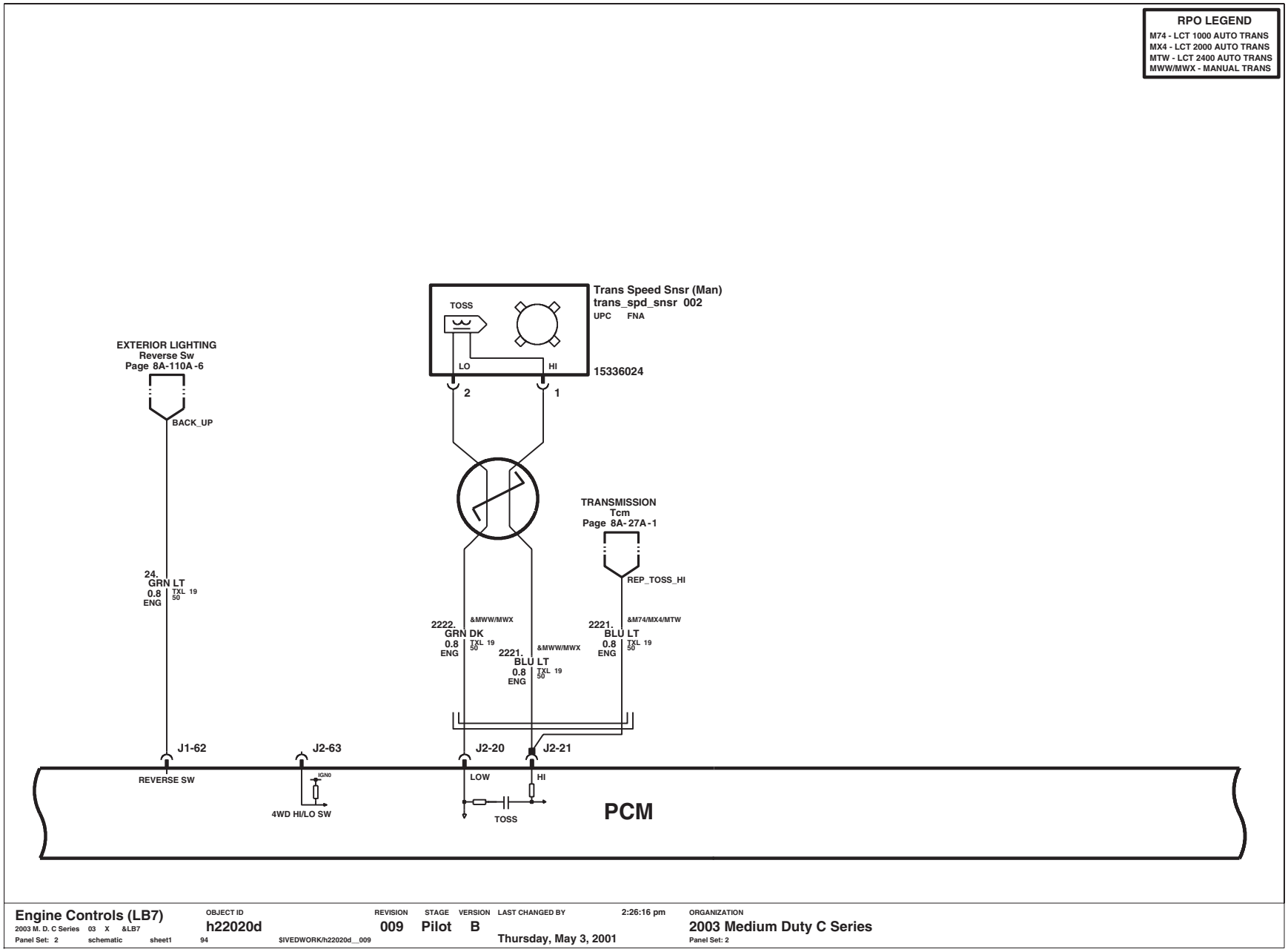

03 560 000 JG PILOT B - INITIAL CREATION 06OC00 001
03 560 794 JG ECU - Pinout Change J1-68 to J1-19 09SE00 001
03 560 805 JG Remove School Bus 27OC00 001
03 560 992 JG Update Telltale Control 08MR01 001
03 560 1062 JG Update Ether Sol, Pin Label Update 25JL01 001
COOL_PPS (Page 8)
HIS_PPS (Page 7)
UPFITTER PROVISIONS Tap Down Sw Page 8A-18C-1
UPFITTER PROVISIONS Kill Sw Page 8A-18C-1
UPFITTER PROVISIONS Tap Up Sw Page 8A-18C-1
2 SPEED AXLE 2 Spd Axle Sw Page 8A-37C-1
2 SPEED AXLE 2 Spd Axle Sw Page 8A-37C-2
UPFITTER PROVISIONS Pto Sw Page 8A-18C-1
2 SPEED AXLE 2 Spd Axle Sw Page 8A-37C-1
EXH BRAKE/RSTR Exhaust Brake Sw Page 8A-29A-1
PTO_DN_PPS
PTO_KIL_PPS
PTO_UP_PPS
451 2SP_E_PPS
2SP_A_PPS
PTO_SW_PPS
2SP_SW1_PPS
EXH_SW_G
451. BLK/WHT 0.8 ENG TXL 19 50
983. BLK 0.5 IP_EXTN TXL 7 50
989. PNK 0.5 IP_EXTN TXL 7 50
SD451
SA983
PPS_RTN (Page 6)
PPS (Page 6)
C5 15355479 30M GTMXD SLD ENG IP 30F GTMXD SLD 15355480
BRAKES Brake Sw Page 8A-44B/C-4
CRUISE CNTRL Cruise Cntrl Sw Page 8A-34C-1
BR_SW_PPS
CRUISE_PPS
15304908 30F GTMXD IP_EXTN IP 30M GTMXD 15326762
A8 A8
B4 B4
451. BLK/WHT 0.8 IP TXL 19 50
451. BLK/WHT 0.5 IP TXL 7 50
SF451
15304908 30F GTMXD IP XBDY 30M GTMXD 15326762
B10 B10
981. BRN 0.5 XBDY TXL 7 50
CLUTCH3_PPS (Page 4)
RPO LEGEND
K40 - EXHAUST BRAKE
Engine Controls (LG5)
2003 M. D. C Series 03 X &LG5
Panel Set: 9 schematic sheet1 70
OBJECT ID h22020c
$IVEDWORK/h22020c__006
REVISION 006
STAGE Pilot
VERSION B
LAST CHANGED BY
Thursday, July 26, 2001
12:57:13 pm
ORGANIZATION
2003 Medium Duty C Series
Panel Set: 9

Engine Controls — (LB7) 6.6L-Diesel/Duramax

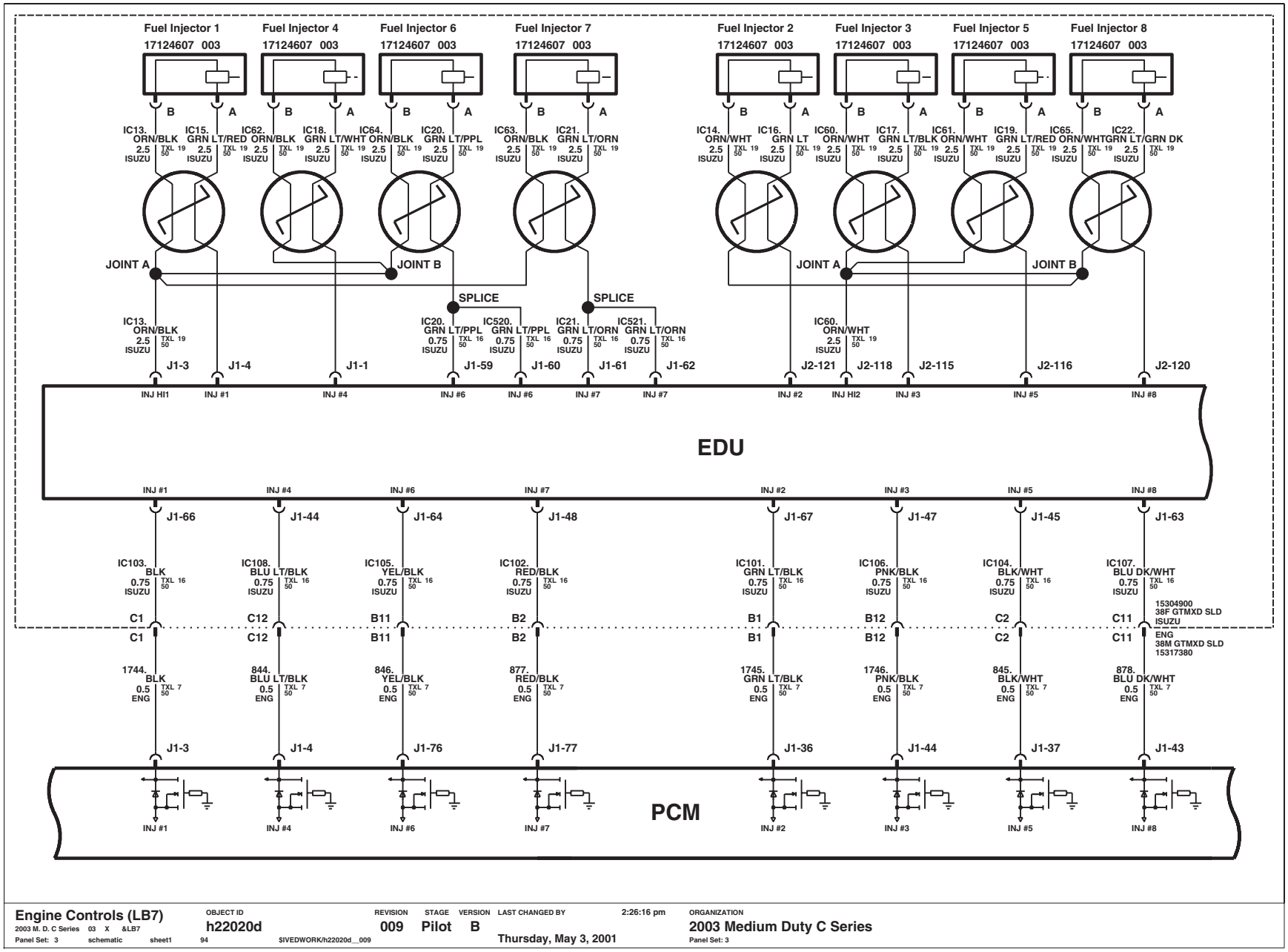


Engine Controls (LB7)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X &LB7	h22020d	009	Pilot	B		2:26:16 pm	2003 Medium Duty C Series
Panel Set: 1 schematic sheet1 94	$IVEDWORK/h22020d__009				Thursday, May 3, 2001		Panel Set: 1

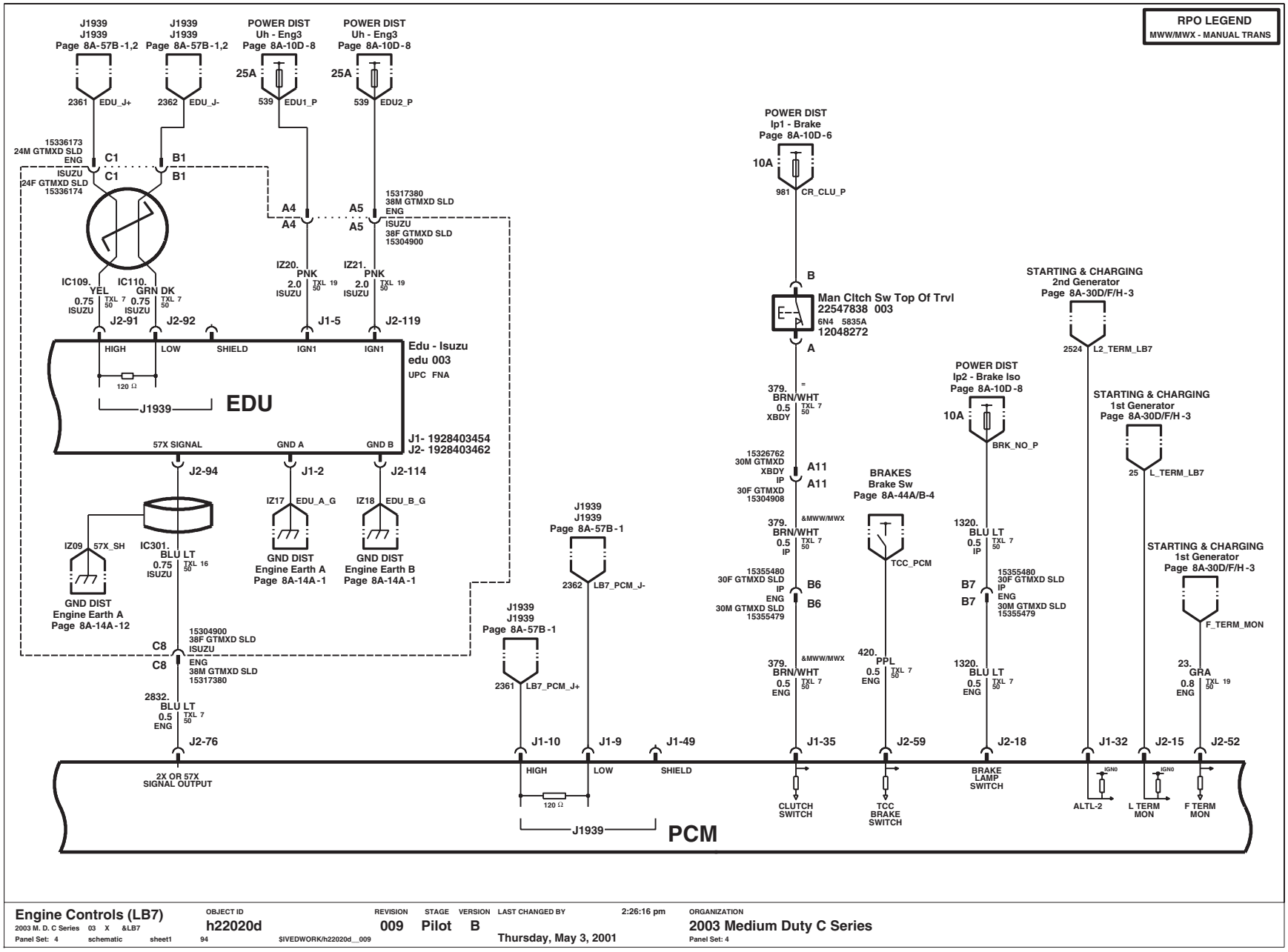
Engine Controls — (LB7) 6.6L-Diesel/Duramax



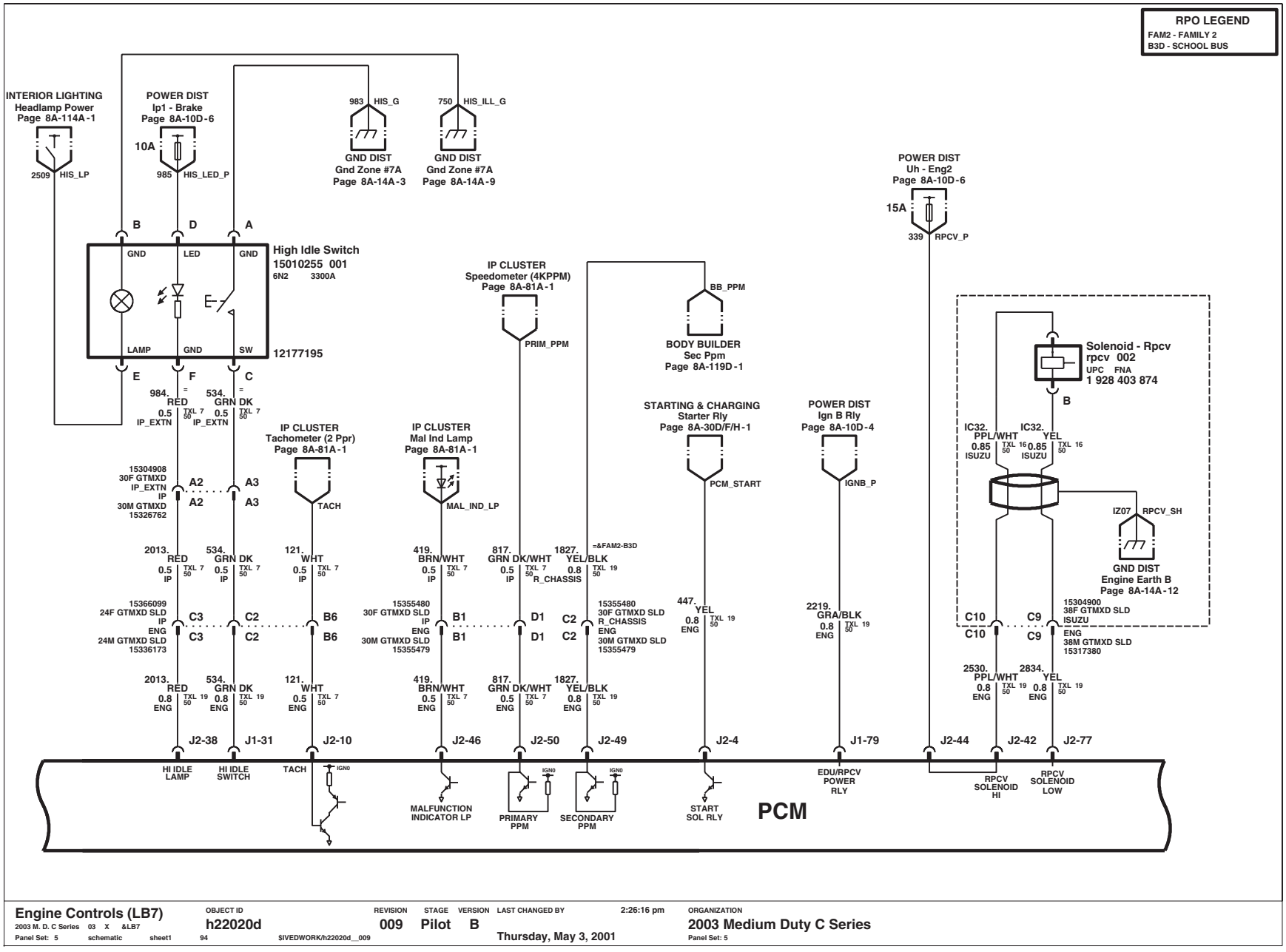
Engine Controls — (LB7) 6.6L-Diesel/Duramax



Engine Controls — (LB7) 6.6L-Diesel/Duramax



Engine Controls — (LB7) 6.6L-Diesel/Duramax



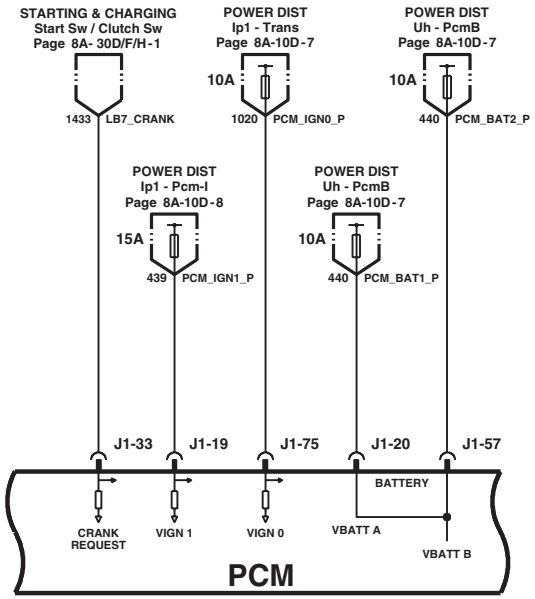
Engine Controls (LB7)
2003 M. D. C Series 03 X &LB7
Panel Set: 5 schematic sheet1 94

OBJECT ID: h22020d
$IVEDWORK/h22020d__009

REVISION: 009
STAGE: Pilot
VERSION: B
LAST CHANGED BY: Thursday, May 3, 2001
2:26:16 pm

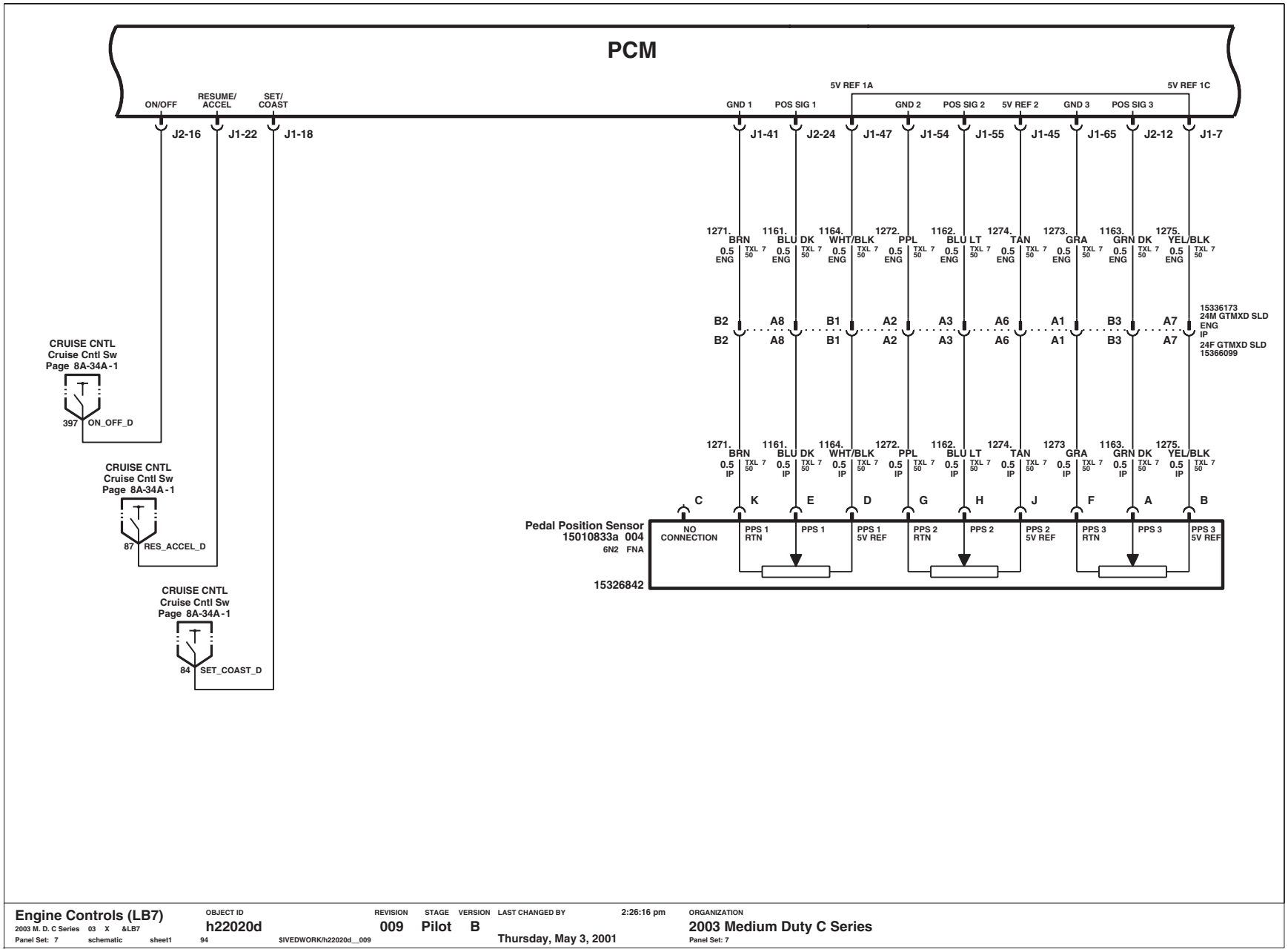
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 5

Engine Controls — (LB7) 6.6L-Diesel/Duramax



Engine Controls (LB7)	OBJECT ID		REVISION	STAGE	VERSION	LAST CHANGED BY	2:26:16 pm	ORGANIZATION
2003 M. D. C Series 03 X &LB7	**h22020d**		**009**	**Pilot**	**B**			**2003 Medium Duty C Series**
Panel Set: 6 schematic sheet1 94	$IVEDWORK/h22020d__009					**Thursday, May 3, 2001**		Panel Set: 6

Engine Controls — (LB7) 6.6L-Diesel/Duramax



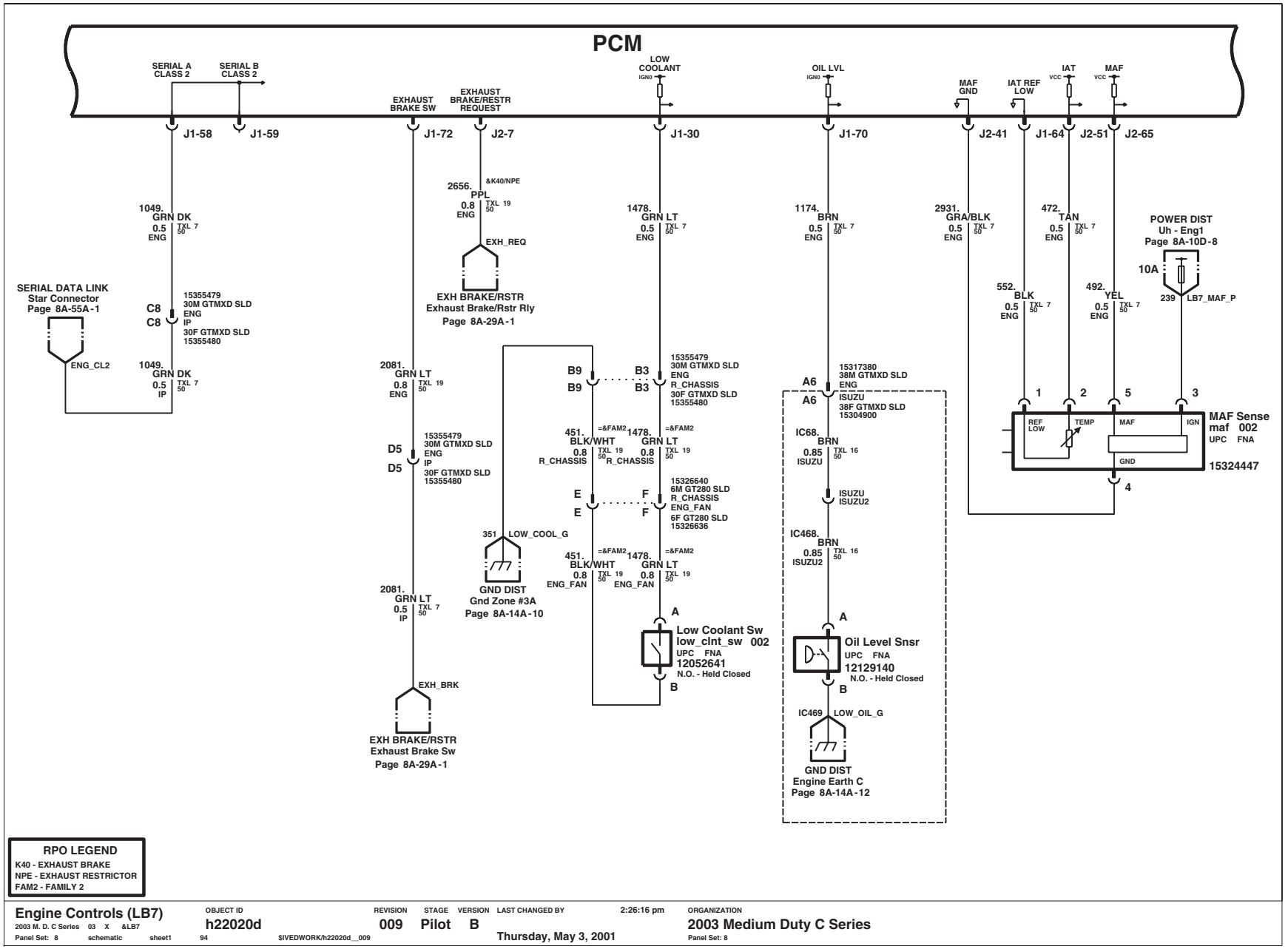
Engine Controls (LB7)
2003 M. D. C Series 03 X &LB7
Panel Set: 7 schematic sheet1 94

OBJECT ID h22020d
$IVEDWORK/h22020d__009

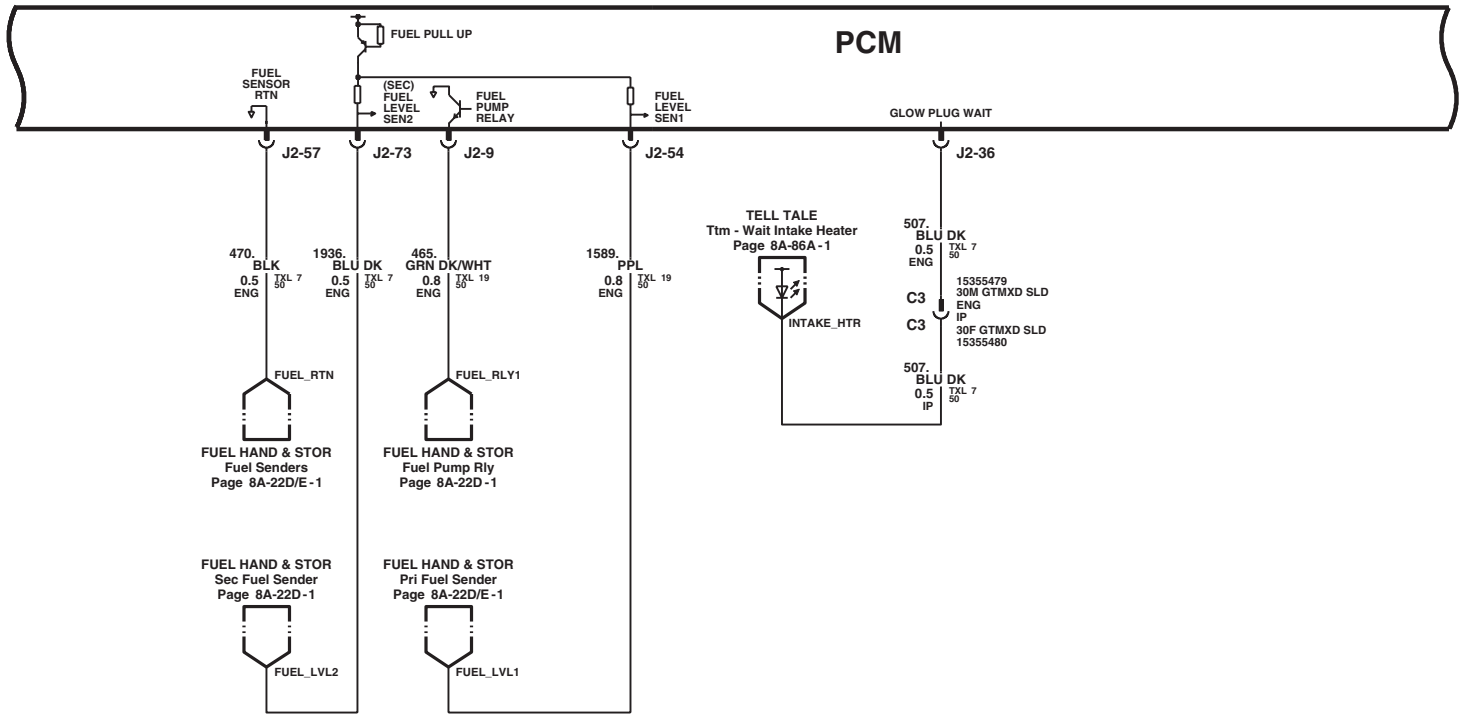
REVISION 009 STAGE Pilot VERSION B
LAST CHANGED BY
Thursday, May 3, 2001 2:26:16 pm

ORGANIZATION
2003 Medium Duty C Series
Panel Set: 7

Engine Controls — (LB7) 6.6L-Diesel/Duramax

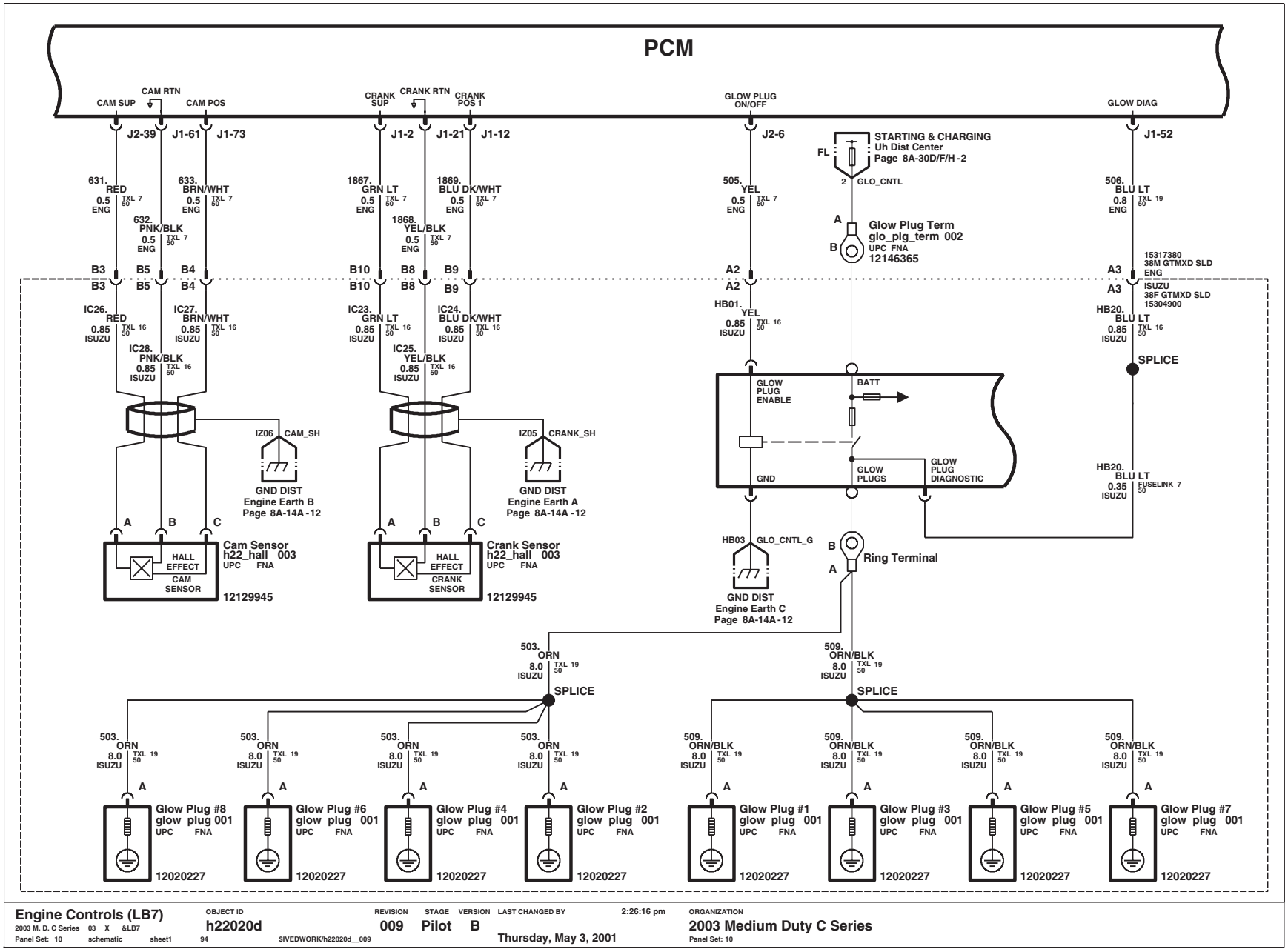


Engine Controls — (LB7) 6.6L-Diesel/Duramax



Engine Controls (LB7)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X &LB7	h22020d	009	Pilot	B		2:26:16 pm	2003 Medium Duty C Series
Panel Set: 9 schematic sheet1 94	$IVEDWORK/h22020d__009				Thursday, May 3, 2001		Panel Set: 9

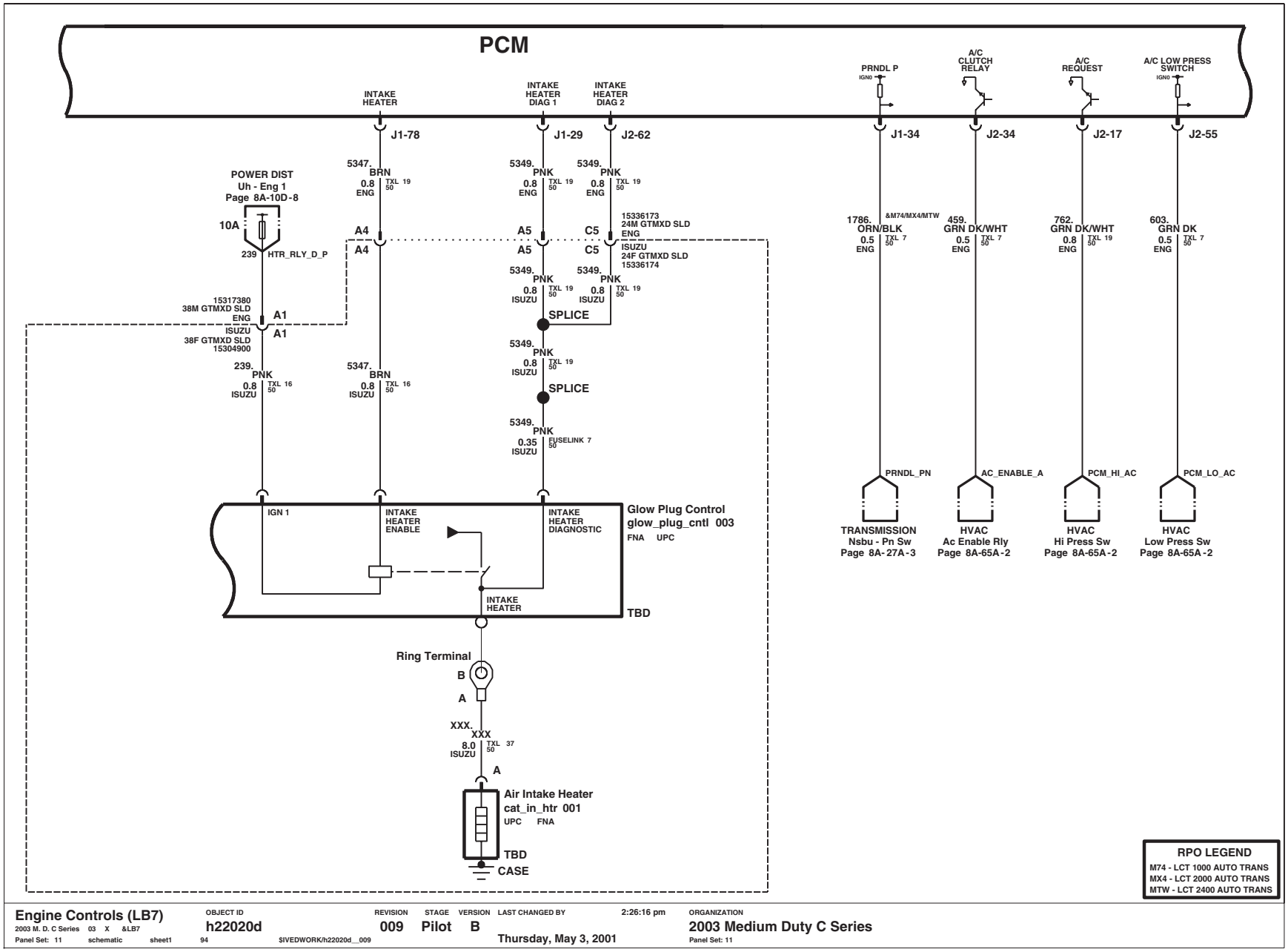
Engine Controls — (LB7) 6.6L-Diesel/Duramax



Engine Controls (LB7)
2003 M. D. C Series 03 X &LB7
Panel Set: 10 schematic sheet1 94 $IVEDWORK/h22020d__009

OBJECT ID: h22020d
REVISION: 009
STAGE: Pilot
VERSION: B
LAST CHANGED BY: Thursday, May 3, 2001
2:26:16 pm
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 10

Engine Controls — (LB7) 6.6L-Diesel/Duramax

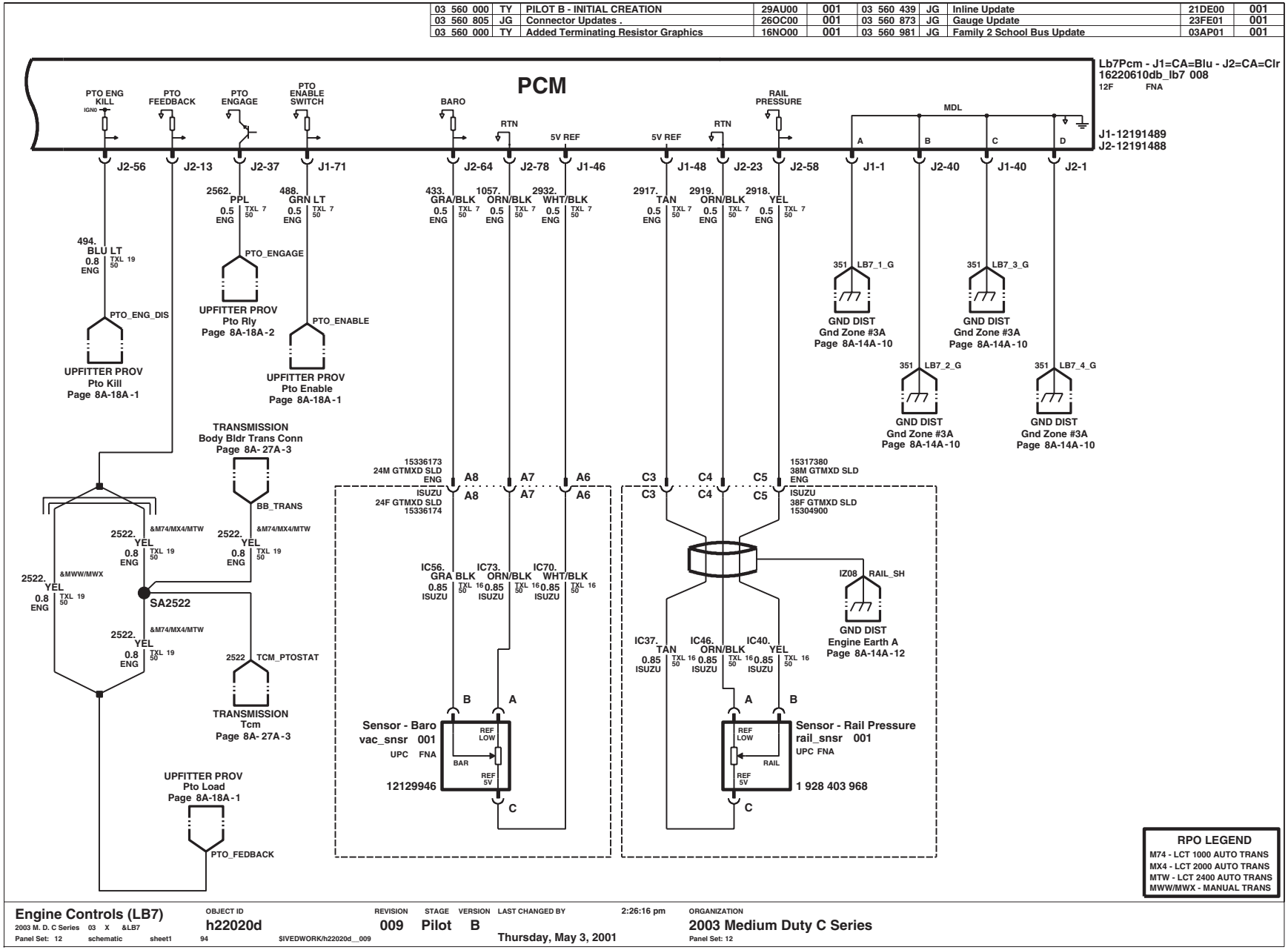


Engine Controls (LB7)
2003 M. D. C Series 03 X &LB7
Panel Set: 11 schematic sheet1 94 $IVEDWORK/h22020d__009

OBJECT ID: h22020d
REVISION: 009
STAGE: Pilot
VERSION: B
LAST CHANGED BY:
Thursday, May 3, 2001
2:26:16 pm
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 11

Engine Controls — (LB7) 6.6L-Diesel/Duramax

03 560 000	TY	PILOT B - INITIAL CREATION	29AU00	001	03 560 439	JG	Inline Update	21DE00	001
03 560 805	JG	Connector Updates .	26OC00	001	03 560 873	JG	Gauge Update	23FE01	001
03 560 000	TY	Added Terminating Resistor Graphics	16NO00	001	03 560 981	JG	Family 2 School Bus Update	03AP01	001



Engine Controls (LB7)
2003 M. D. C Series 03 X &LB7
Panel Set: 12 schematic sheet1 94

OBJECT ID: h22020d
REVISION: 009
STAGE: Pilot
VERSION: B
LAST CHANGED BY: Thursday, May 3, 2001
2:26:16 pm
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 12
$IVEDWORK/h22020d__009

Engine Controls — (LB7) 6.6L-Diesel/Duramax

GMTG/ISUZU INLINE CHART

I1 — 15317380 GMTG (MALE) / 15304900 ISUZU (FEMALE)

CAVITY	FUNCTION	CIRCUIT NO.
A1	INTAKE HEATER RELAY IGN 1	239
A2	GLOW ON	505
A3	GLOW DIAG	506
A4	FUEL INJECTOR FEED (EDU)	539
A5	FUEL INJECTOR FEED (EDU)	539
A6	LOW OIL SENSOR - SIGNAL	1174
A7	COOLANT TEMP SNSR - SIG	410
A8	COOLANT TEMP - 5V RTN	720
B1	INJECTOR #2	1745
B2	INJECTOR #7	877
B3	VDEPSB - CAM	631
B4	CAM - SIGNAL	633
B5	DEPSGNDB - CAM	632
B6	n/c	n/c
B7	n/c	n/c
B8	VDEPSGNDA - CRANK	1868
B9	CRANK - SIGNAL	1869
B10	VDEPSA - CRANK	1867
B11	INJECTOR #6	846
B12	INJECTOR #3	1746
C1	INJECTOR #1	1744
C2	INJECTOR #5	845
C3	RAIL PRESSURE - 5V	2917
C4	RAIL PRESSURE - RTN	2919
C5	RAIL PRESSURE - SIGNAL	2918
C6	FUEL HEATER - FEED	2677
C7	n/c	n/c
C8	57X OUT	2832
C9	RPCV - LO	2834
C10	RPCV - HI	2530
C11	INJECTOR #8	878
C12	INJECTOR #4	844
D1	FUEL TEMPERATURE	1578
D2	FUEL TEMP - GROUND	718
D3	WIF SENSOR	508
D6	OIL PRESSURE	332
D7	OIL PRESSURE - RTN	407
D8	OIL PRESSURE 5V - REF	705

C6: See page h22023d

D3: See page h22023d

I2 — 15336173 GMTG (MALE) / 15336174 ISUZU (FEMALE)

CAVITY	FUNCTION	CIRCUIT NO.
A1	n/c	n/c
A2	CAN LINK ISOLATION	XXX
A3	RESERVED (SWIRL CNRTL)	n/c
A4	INTAKE HEATER ENABLE	5347
A5	INTAKE HEATER DIAG 1	5349
A6	BARO - 5V	2932
A7	BARO - RTN	1057
A8	BARO - SIGNAL	433
B1	CAN LINK LO (EDU)	2362
B2	CAN LINK ISOLATION	XXX
B3	RESERVED (Q-WARM)	n/c
B4	n/c	n/c
B5	n/c	n/c
B6	n/c	n/c
B7	n/c	n/c
B8	n/c	n/c
C1	CAN LINK HI (EDU)	2361
C2	CAN LINK ISOLATION	XXX
C3	RESERVED (WASTEGATE)	n/c
C4	n/c	n/c
C5	INTAKE HEATER DIAG 2	5349
C6	MAP - 5V	597
C7	MAP - RTN	469
C8	MAP - SIGNAL	432

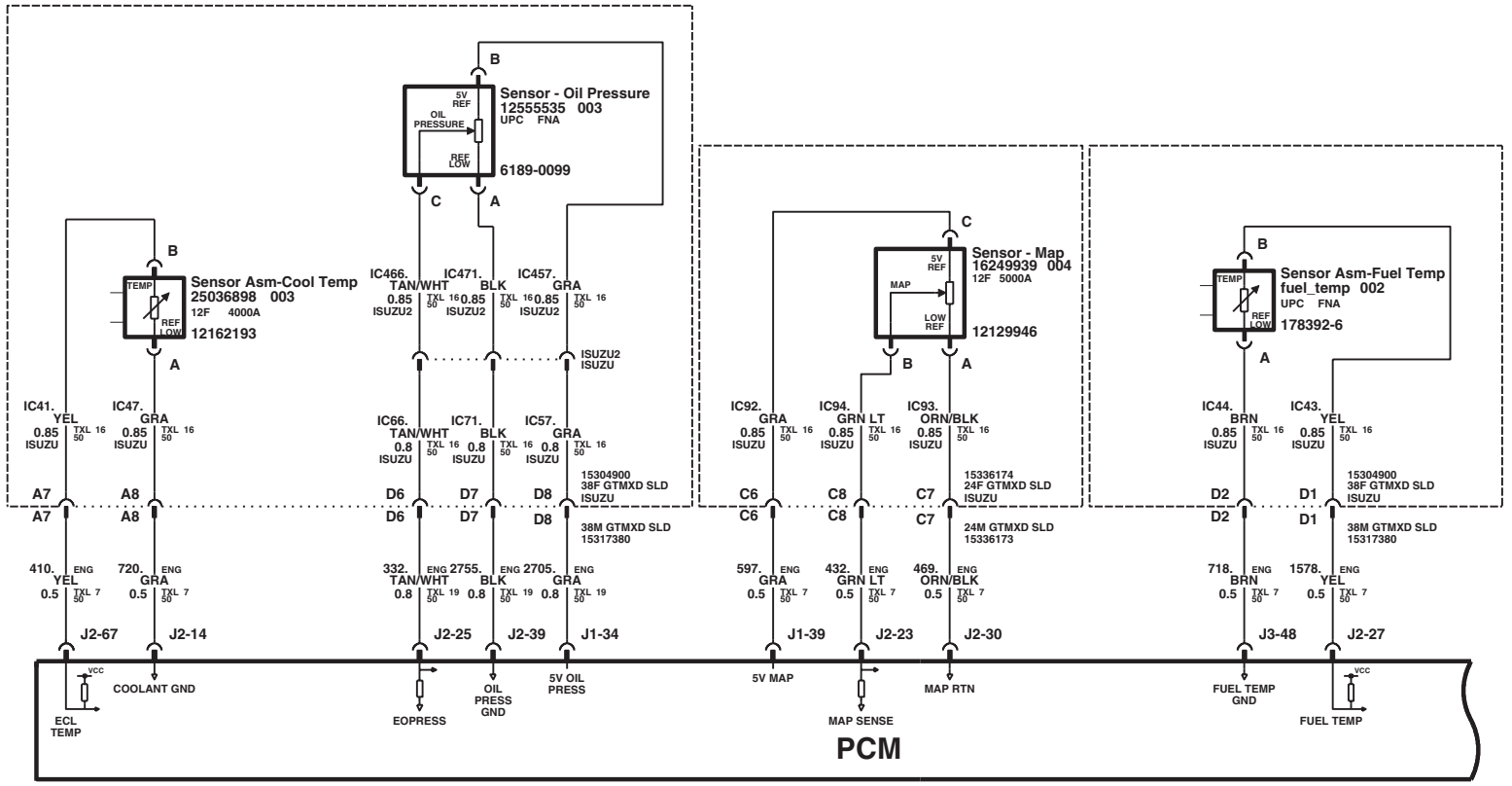
Ring Terminal - 12146365

FUNCTION	CIRCUIT NO.
GLOW PLUG FEED	2

NOTE: XXX = Physical isolation for Can link
n/c = No connection

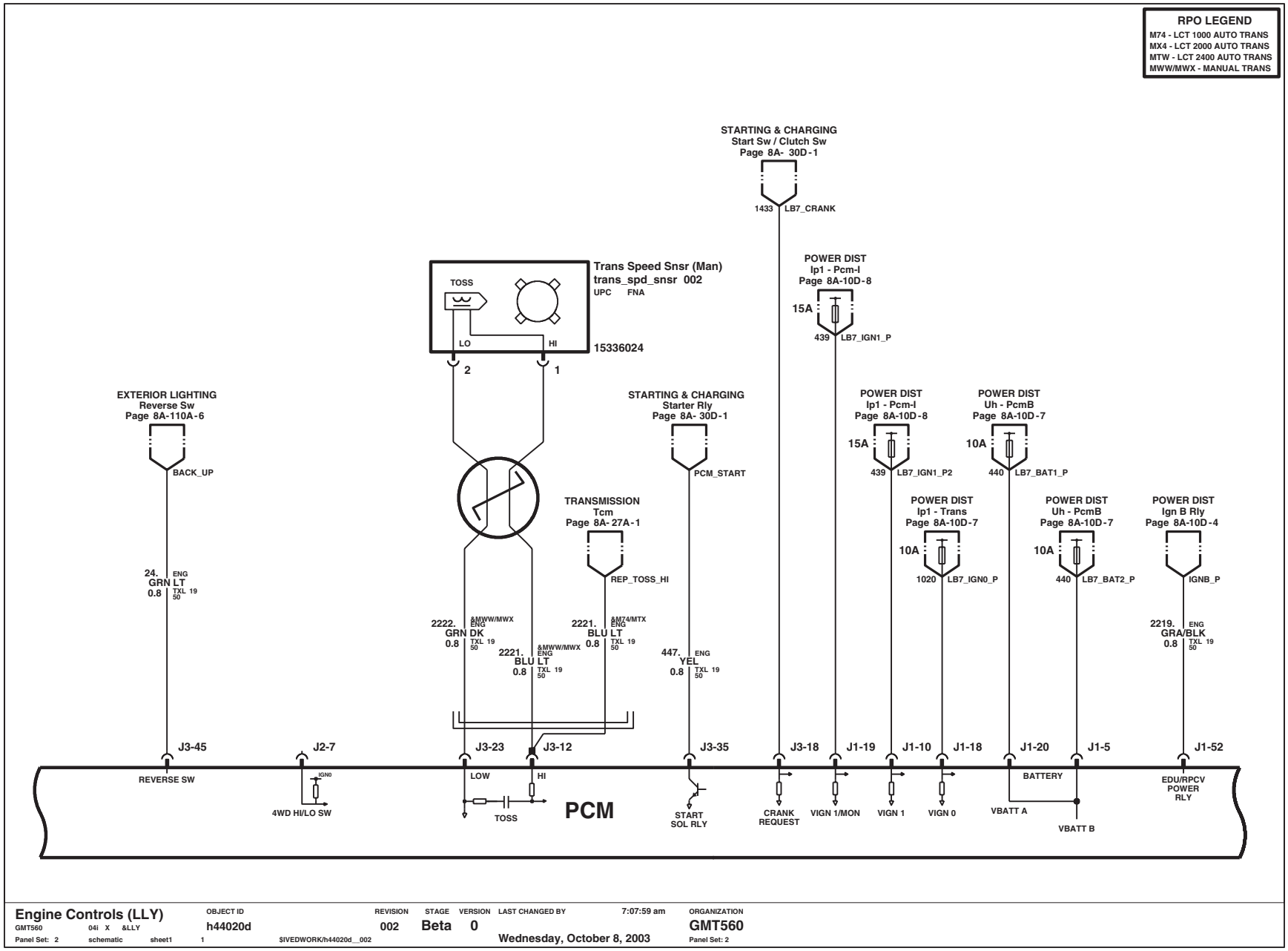
Engine Controls (LB7) 2003 M. D. C Series 03 X &LB7 Panel Set: 13 schematic sheet1 94
OBJECT ID h22020d $IVEDWORK/h22020d__009
REVISION 009 STAGE Pilot VERSION B
LAST CHANGED BY Thursday, May 3, 2001 2:26:16 pm
ORGANIZATION 2003 Medium Duty C Series Panel Set: 13

Engine Controls — (LLY) 6.6L-Diesel/Duramax

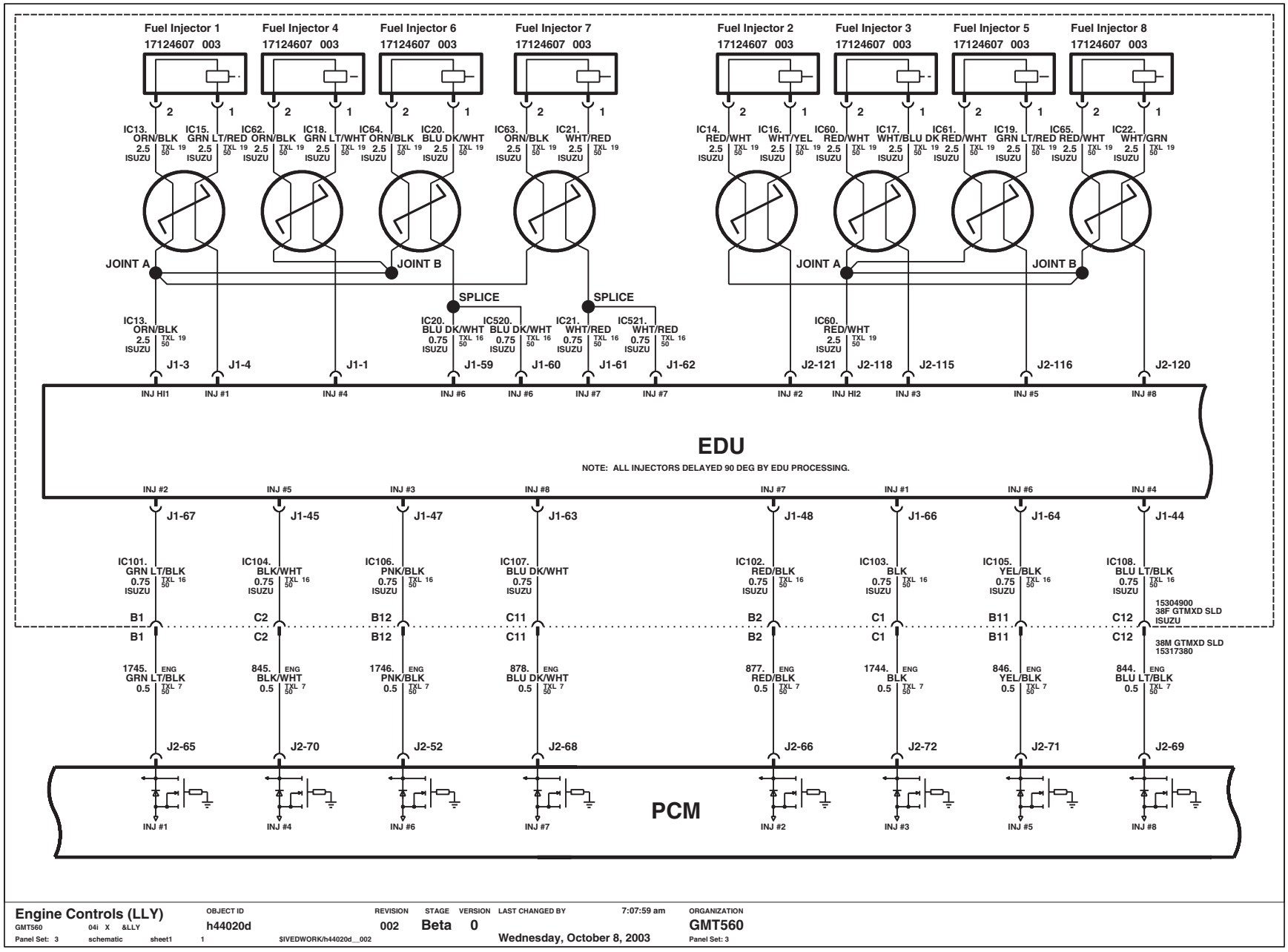


Engine Controls (LLY) | OBJECT ID h44020d | REVISION 002 | STAGE Beta | VERSION 0 | LAST CHANGED BY | 7:07:59 am | ORGANIZATION GMT560
GMT560 04i X &LLY | Panel Set: 1 schematic sheet1 1 | $IVEDWORK/h44020d__002 | Wednesday, October 8, 2003 | Panel Set: 1

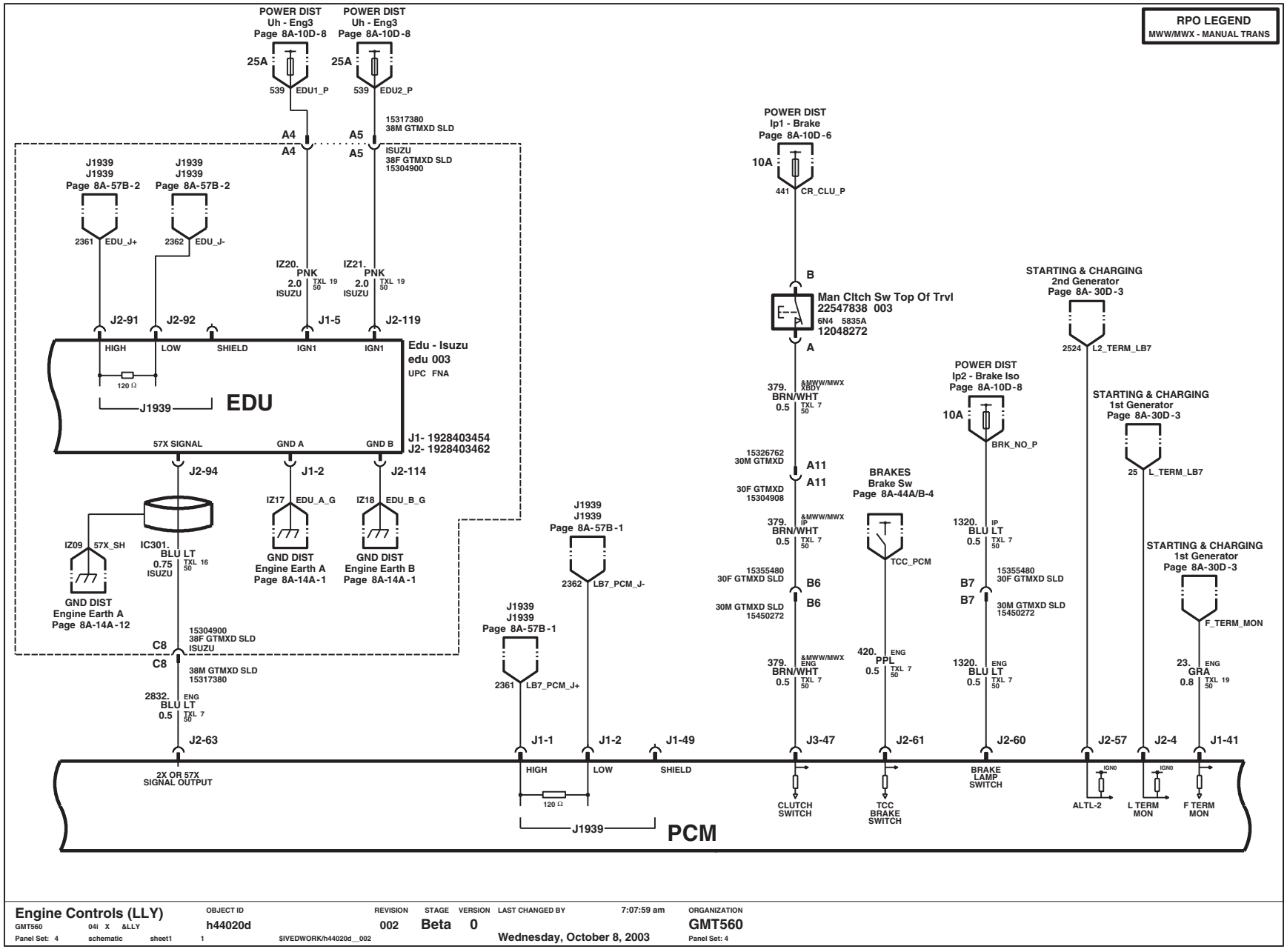
Engine Controls — (LLY) 6.6L-Diesel/Duramax



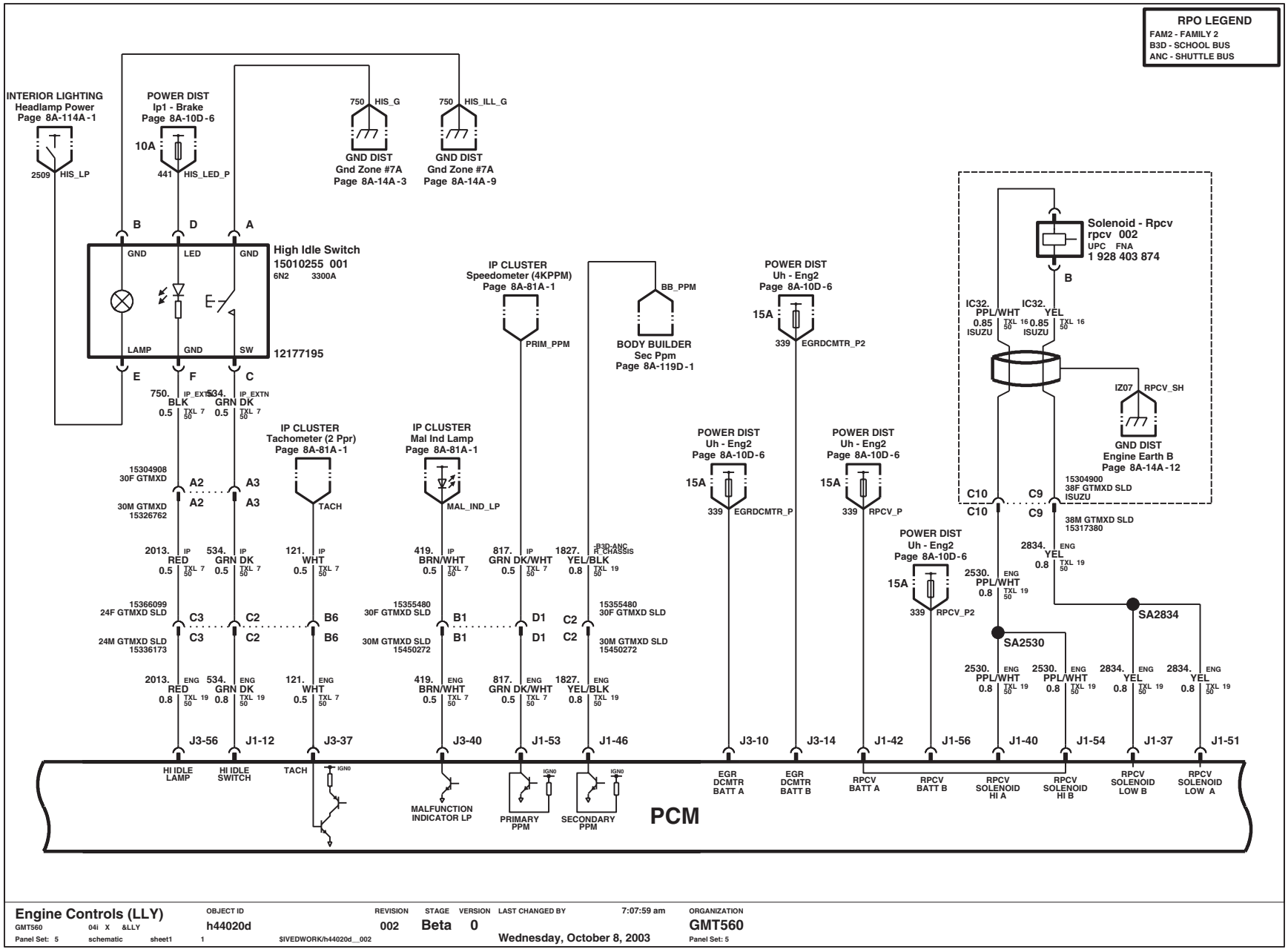
Engine Controls — (LLY) 6.6L-Diesel/Duramax



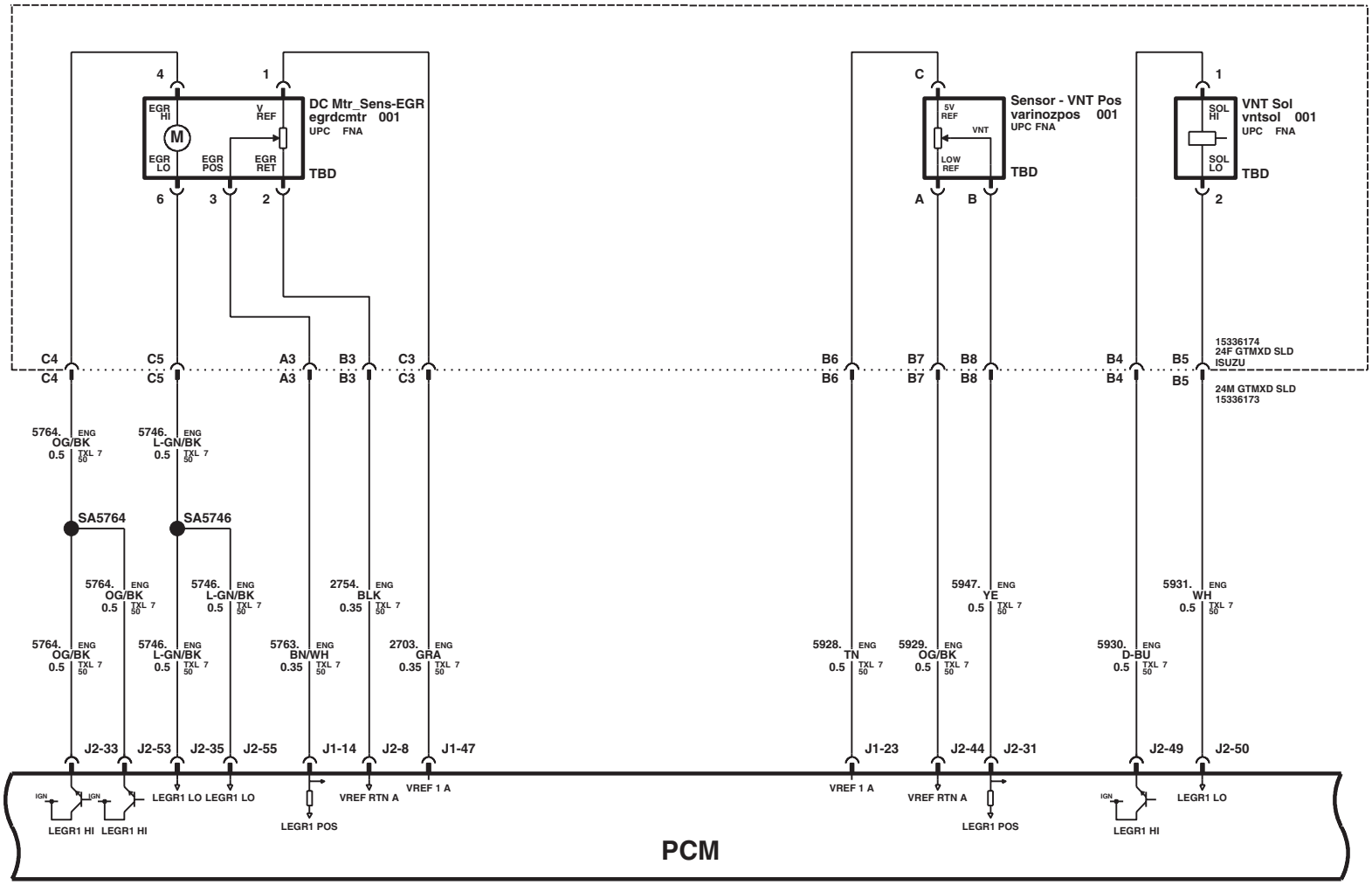
Engine Controls — (LLY) 6.6L-Diesel/Duramax



Engine Controls — (LLY) 6.6L-Diesel/Duramax

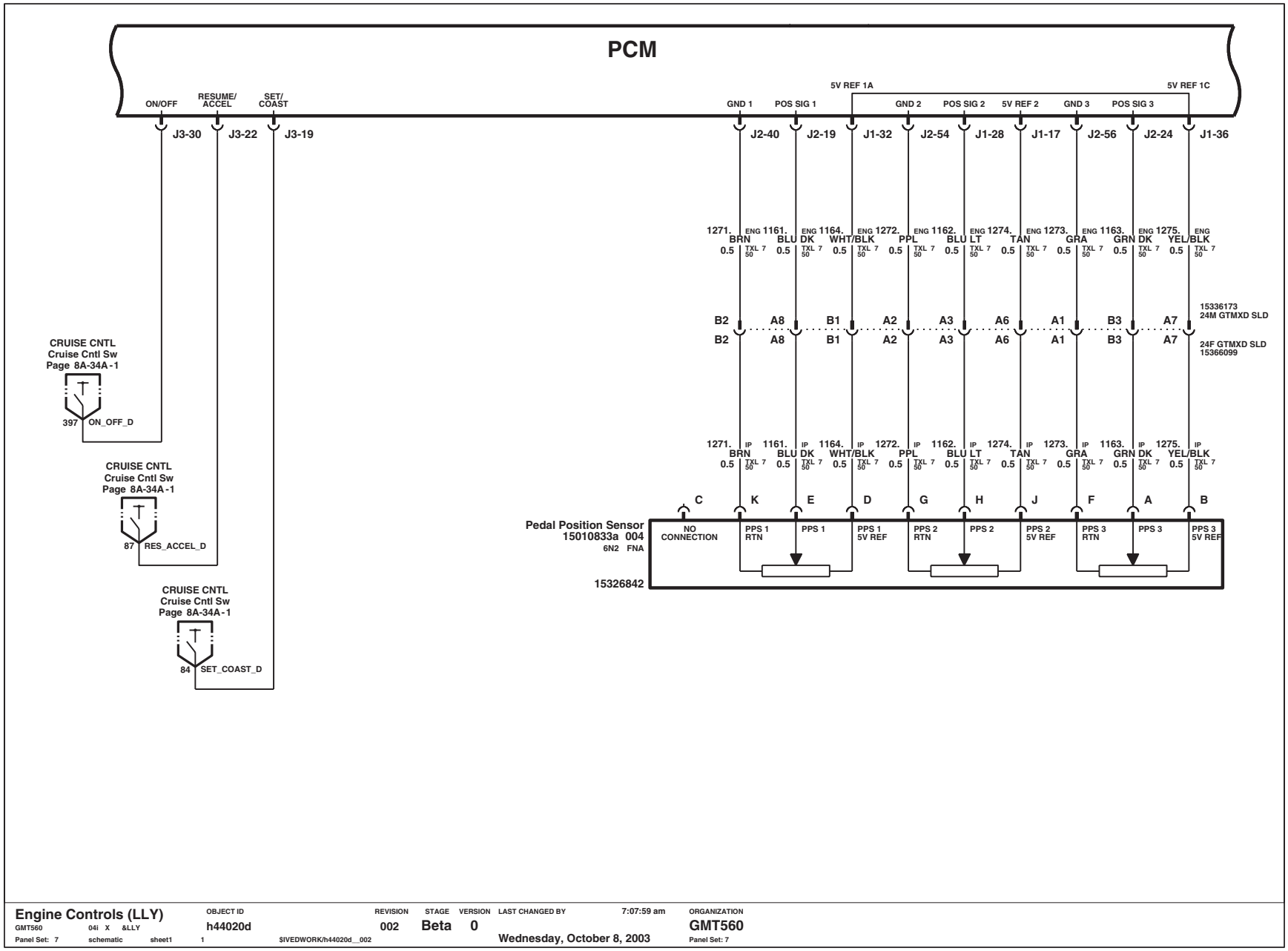


Engine Controls — (LLY) 6.6L-Diesel/Duramax



Engine Controls (LLY)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY	7:07:59 am	ORGANIZATION
GMT560 04i X &LLY	h44020d	002	Beta	0			GMT560
Panel Set: 6 schematic sheet1 1	$IVEDWORK/h44020d__002				Wednesday, October 8, 2003		Panel Set: 6

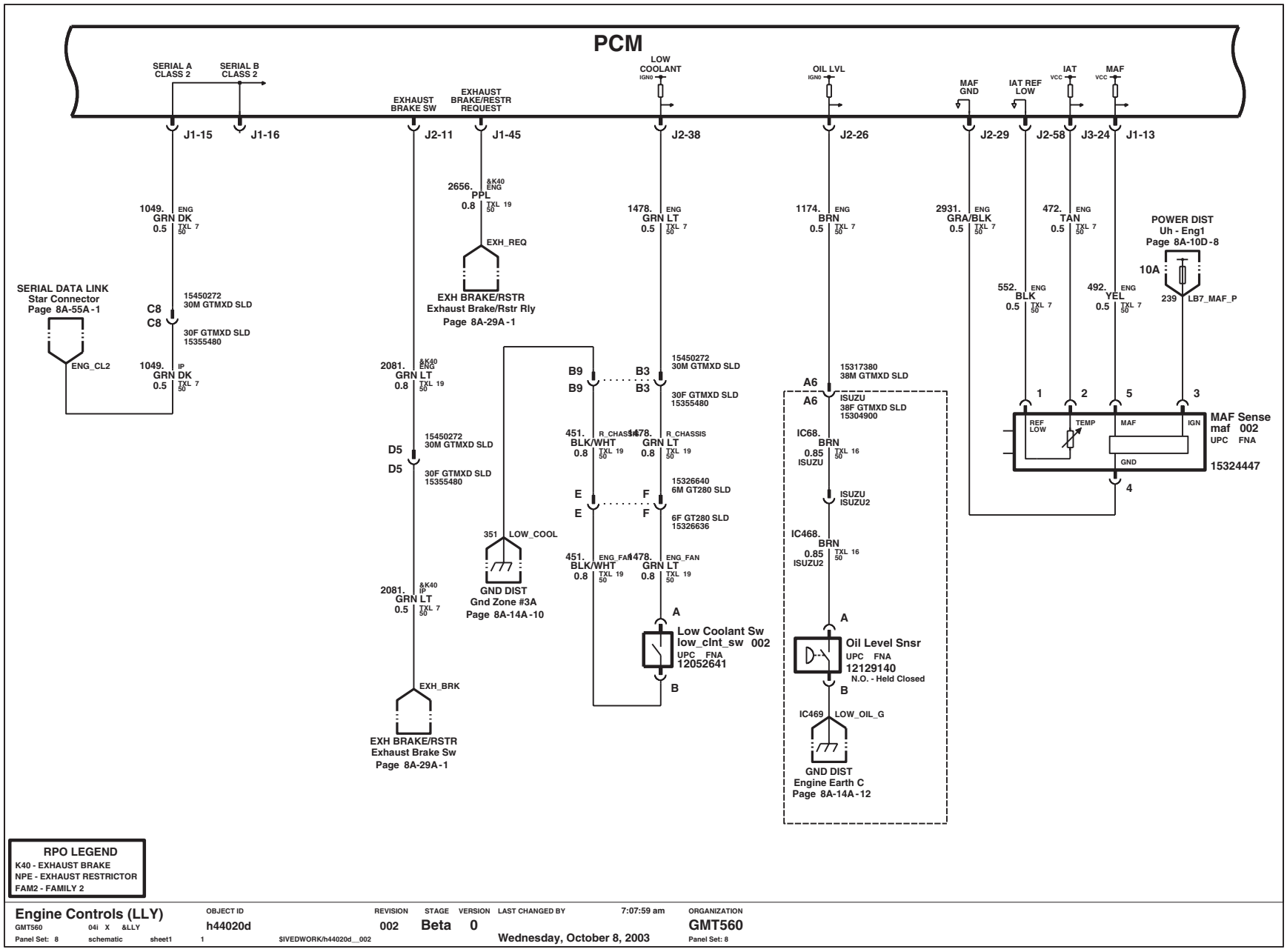
Engine Controls — (LLY) 6.6L-Diesel/Duramax



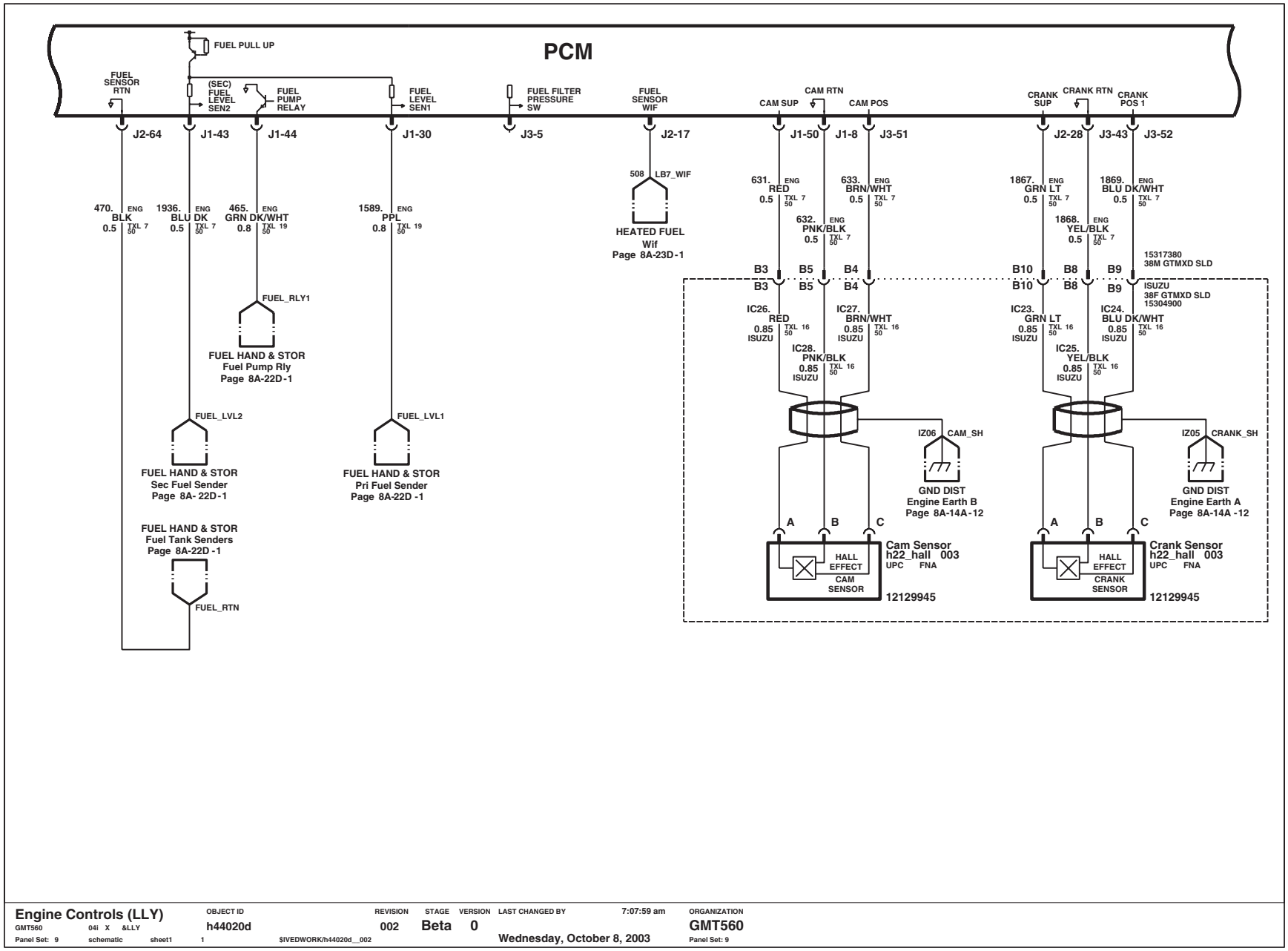
Engine Controls (LLY) | OBJECT ID h44020d | REVISION 002 | STAGE Beta | VERSION 0 | LAST CHANGED BY | 7:07:59 am | Wednesday, October 8, 2003 | ORGANIZATION GMT560

GMT560 04i X &LLY | Panel Set: 7 schematic sheet1 1 $IVEDWORK/h44020d__002 | Panel Set: 7

Engine Controls — (LLY) 6.6L-Diesel/Duramax

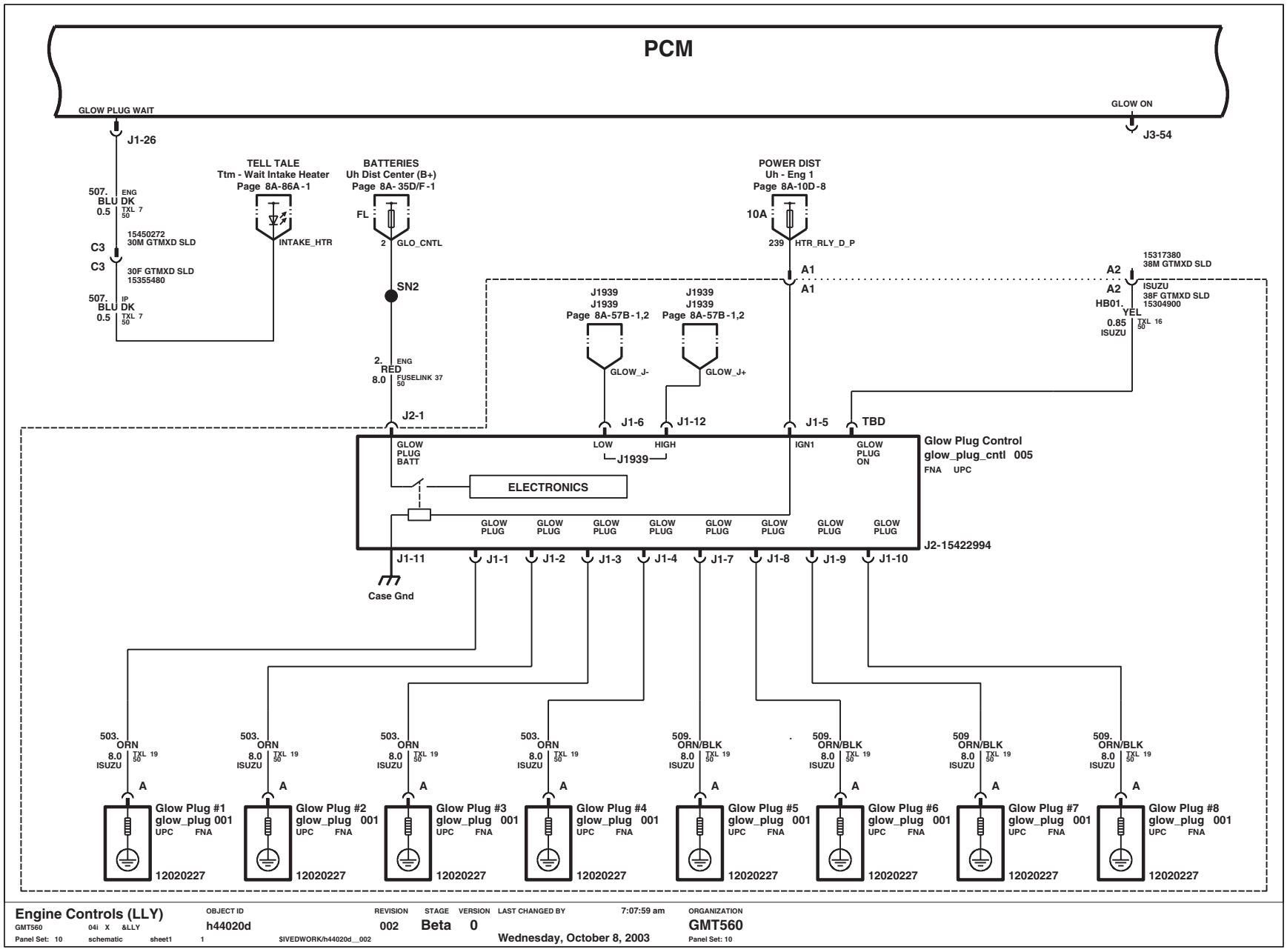


Engine Controls — (LLY) 6.6L-Diesel/Duramax

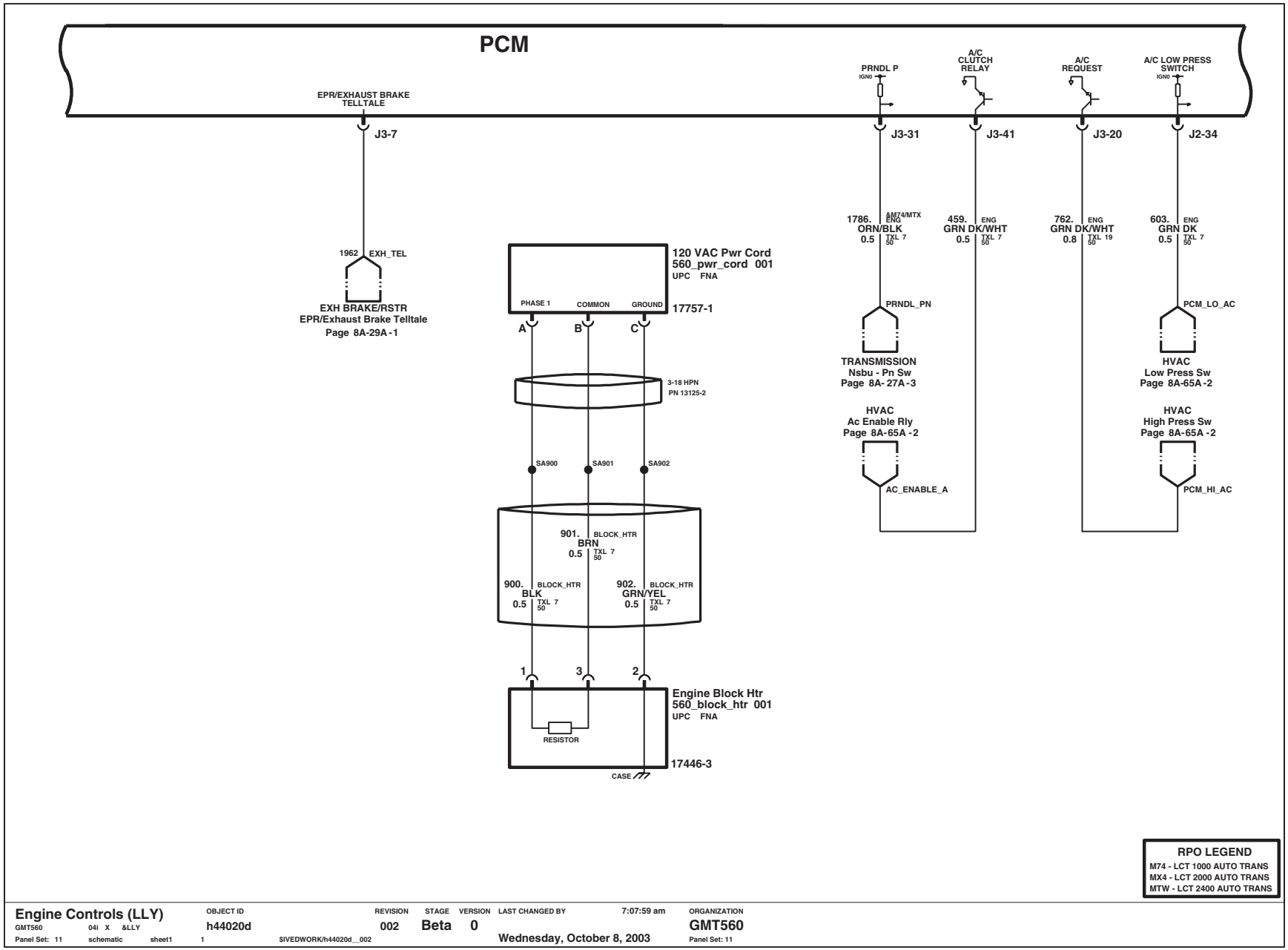


Engine Controls (LLY)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
GMT560 04i X &LLY	h44020d	002	Beta	0		7:07:59 am	GMT560
Panel Set: 9 schematic sheet1 1	$IVEDWORK/h44020d__002				Wednesday, October 8, 2003		Panel Set: 9

Engine Controls — (LLY) 6.6L-Diesel/Duramax



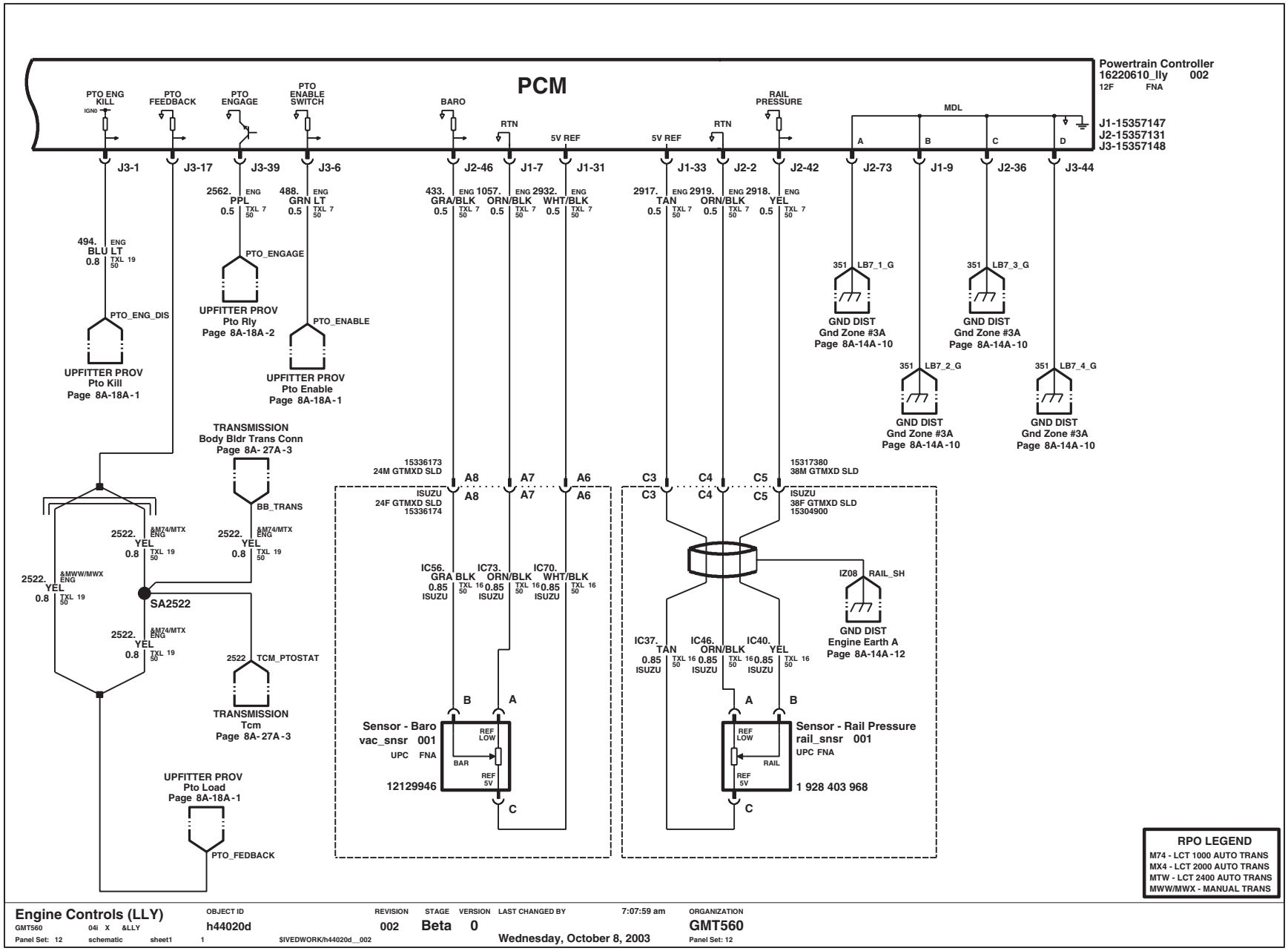
Engine Controls — (LLY) 6.6L-Diesel/Duramax



RPO LEGEND
M74 - LCT 1000 AUTO TRANS
MX4 - LCT 2000 AUTO TRANS
MTW - LCT 2400 AUTO TRANS

Engine Controls (LLY)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY	7:07:59 am	ORGANIZATION
GMT560 04i X &LLY	h44020d	002	Beta	0			GMT560
Panel Set: 11 schematic sheet1 1	$IVEDWORK/h44020d__002				Wednesday, October 8, 2003		Panel Set: 11

Engine Controls — (LLY) 6.6L-Diesel/Duramax



Engine Controls — (LLY) 6.6L-Diesel/Duramax

04 560 000	TY	INITIAL CREATION	10SE01	001
04 560 1149	JG	TRANS RPO UPDATE	13DE01	001
04i 560 1198	JG	Changed LB7 to LLY	27MR02	001
03 560 1228	JG	Added RPO ANC	07MY02	001
04i 560 1230	JG	Insert Fusible Link into Glow Plug 2 ckt	09MY02	001

GMTG/ISUZU INLINE CHART

I1 15317380 GMTG (MALE)
15304900 ISUZU (FEMALE)

CAVITY	FUNCTION	CIRCUIT NO.
A1	INTAKE HEATER RELAY IGN 1	239
A2	GLOW ON	505
A3	n/c	n/c
A4	FUEL INJECTOR FEED (EDU)	539
A5	FUEL INJECTOR FEED (EDU)	539
A6	LOW OIL SENSOR - SIGNAL	1174
A7	COOLANT TEMP SNSR - SIG	410
A8	COOLANT TEMP - 5V RTN	720
B1	INJECTOR #2	1745
B2	INJECTOR #7	877
B3	VDEPSB - CAM	631
B4	CAM - SIGNAL	633
B5	DEPSGNDB - CAM	632
B6	n/c	n/c
B7	n/c	n/c
B8	VDEPSGNDA - CRANK	1868
B9	CRANK - SIGNAL	1869
B10	VDEPSA - CRANK	1867
B11	INJECTOR #6	846
B12	INJECTOR #3	1746
C1	INJECTOR #1	1744
C2	INJECTOR #5	845
C3	RAIL PRESSURE - 5V	2917
C4	RAIL PRESSURE - RTN	2919
C5	RAIL PRESSURE - SIGNAL	2918
C6	FUEL HEATER - FEED	2677
C7	n/c	n/c
C8	57X OUT	2832
C9	RPCV - LO	2834
C10	RPCV - HI	2530
C11	INJECTOR #8	878
C12	INJECTOR #4	844
D1	FUEL TEMPERATURE	1578
D2	FUEL TEMP - GROUND	718
D3	WIF SENSOR	508
D6	OIL PRESSURE	332
D7	OIL PRESSURE - RTN	407
D8	OIL PRESSURE 5V - REF	705

C6: See page 023d
D3: See page 023d

I2 15336173 GMTG (MALE)
15336174 ISUZU (FEMALE)

CAVITY	FUNCTION	CIRCUIT NO.
A1	n/c	n/c
A2	n/c	n/c
A3	EGR POSITION F/B	5763
A4	n/c	n/c
A5	n/c	n/c
A6	BARO - 5V	2932
A7	BARO - RTN	1057
A8	BARO - SIGNAL	433
B1	CAN LINK LO (EDU)	2362
B2	n/c	n/c
B3	EGR POSITION RTN	2754
B4	VNT SOLENOID HI	5774
B5	VNT SOLENOID LO	5773
B6	VNT POSITION 5V	5776
B7	VNT POSITION RTN	5777
B8	VNT POSITION F/B	5775
C1	CAN LINK HI (EDU)	2361
C2	FUEL FILTER PRESSURE SW	5765
C3	EGR POSITION 5V	2703
C4	EGR DC MOTOR HI	5764
C5	EGR DC MOTOR LO	5746
C6	MAP - 5V	597
C7	MAP - RTN	469
C8	MAP - SIGNAL	432

B1: See page 057b
C1: See page 057b

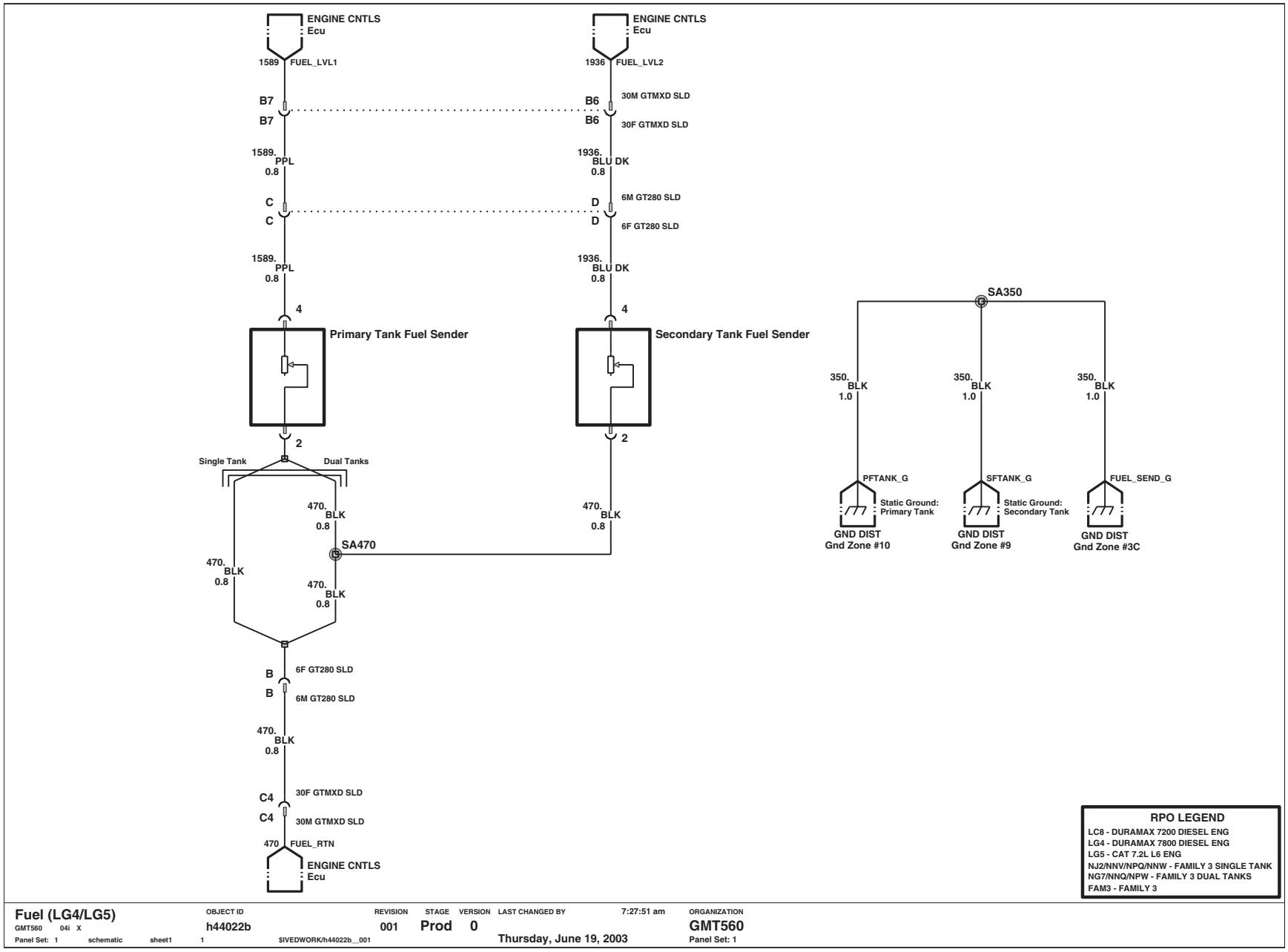
I3 15422994 GMTG

FUNCTION	CIRCUIT NO.
GLOW BATT CNTL	2

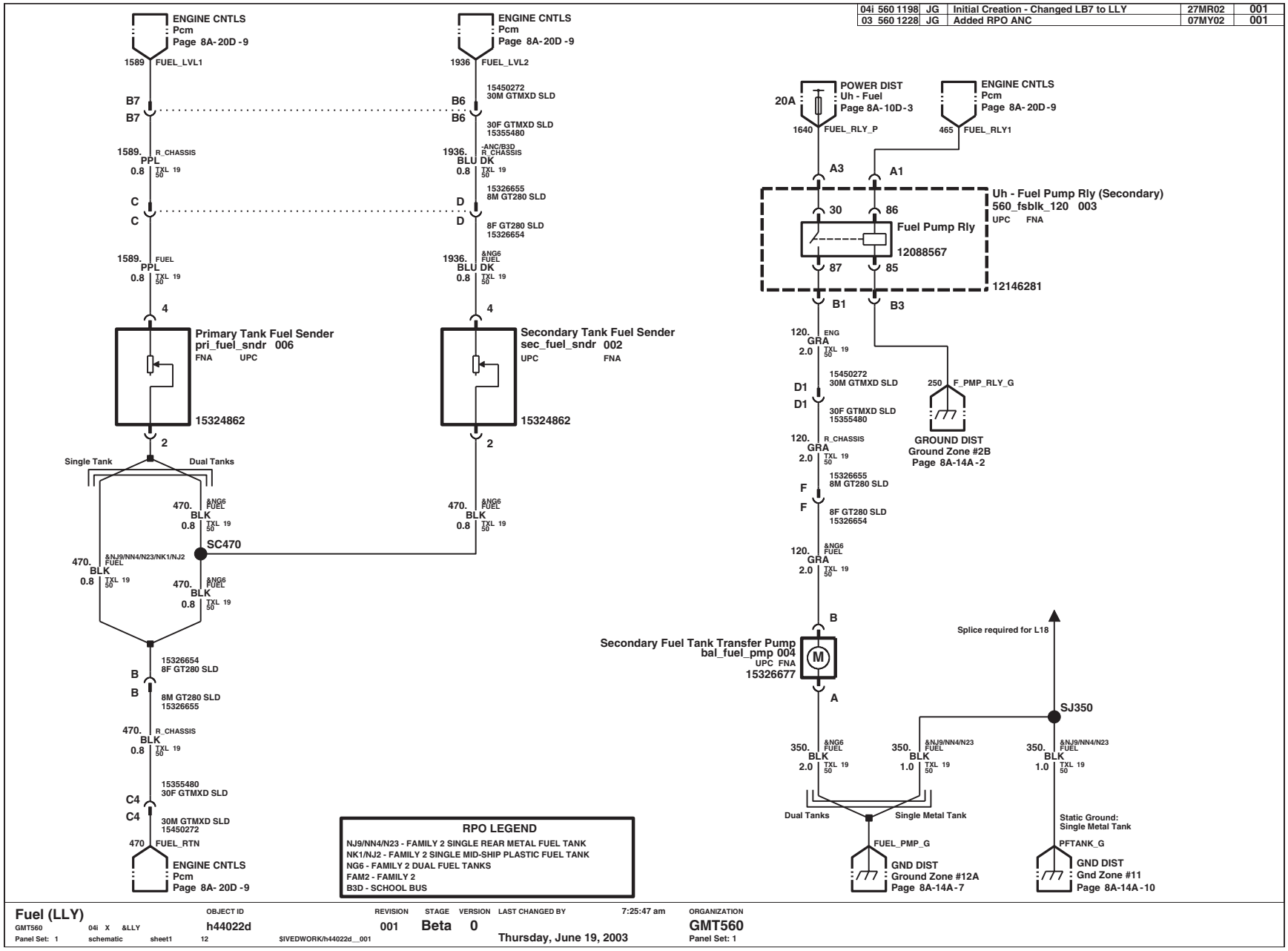
NOTE: XXX = Physical isolation for Can link
n/c = No connection

Engine Controls (LLY)	OBJECT ID		REVISION	STAGE	VERSION	LAST CHANGED BY	7:07:59 am	ORGANIZATION
GMT560 04i X &LLY	h44020d		002	Beta	0			GMT560
Panel Set: 13 schematic sheet1 1	$IVEDWORK/h44020d__002					Wednesday, October 8, 2003		Panel Set: 13

Fuel — (LG4-'04i) 7.8L-Diesel/Duramax

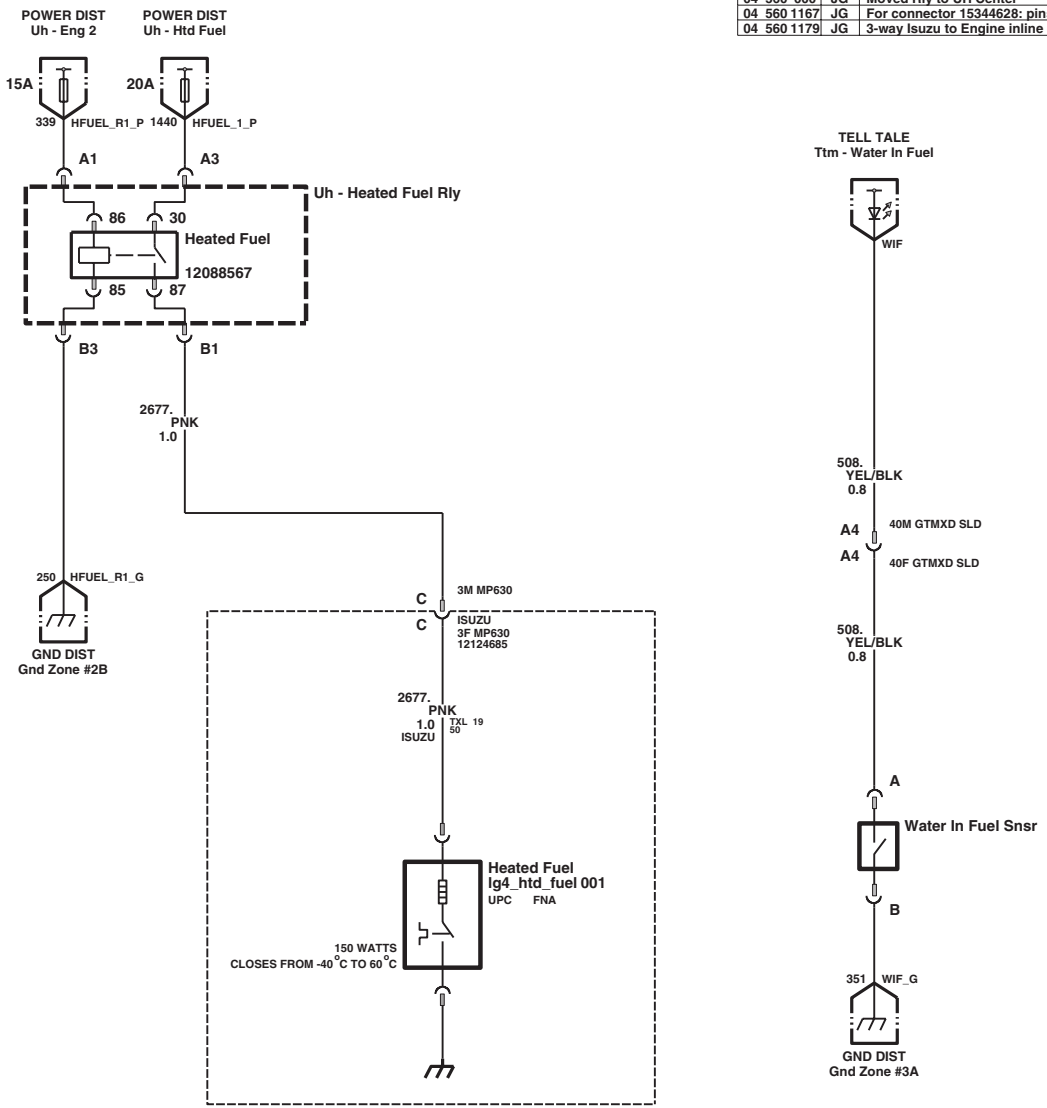


Fuel — (LLY) 6.6L-Diesel/Duramax


04i 560 1198 JG Initial Creation - Changed LB7 to LLY 27MR02 001
03 560 1228 JG Added RPO ANC 07MY02 001
ENGINE CNTLS Pcm Page 8A-20D-9
1589 FUEL_LVL1
1936 FUEL_LVL2
15450272 30M GTMXD SLD
30F GTMXD SLD 15355480
15326655 8M GT280 SLD
8F GT280 SLD 15326654
1589. PPL 0.8 TXL 19 50
1936. BLU DK 0.8 TXL 19 50
R_CHASSIS
FUEL
&NG6 FUEL
Primary Tank Fuel Sender pri_fuel_sndr 006
FNA UPC
Secondary Tank Fuel Sender sec_fuel_sndr 002
UPC FNA
15324862
Single Tank
Dual Tanks
470. BLK 0.8 TXL 19 50
SC470
&NJ9/NN4/NN23/NK1/NJ2 FUEL
15326654 8F GT280 SLD
8M GT280 SLD 15326655
15355480 30F GTMXD SLD
30M GTMXD SLD 15450272
470 FUEL_RTN
POWER DIST Uh - Fuel Page 8A-10D-3
20A
1640 FUEL_RLY_P
465 FUEL_RLY1
Uh - Fuel Pump Rly (Secondary) 560_fsblk_120 003
UPC FNA
Fuel Pump Rly
12088567
12146281
30 86 87 85
120. GRA 2.0 TXL 19 50 ENG
F_PMP_RLY_G
GROUND DIST Ground Zone #2B Page 8A-14A-2
Secondary Fuel Tank Transfer Pump bal_fuel_pmp 004
UPC FNA
15326677
Splice required for L18
SJ350
350. BLK 2.0 TXL 19 50
350. BLK 1.0 TXL 19 50
Dual Tanks
Single Metal Tank
Static Ground: Single Metal Tank
FUEL_PMP_G
PFTANK_G
GND DIST Ground Zone #12A Page 8A-14A-7
GND DIST Gnd Zone #11 Page 8A-14A-10
RPO LEGEND
NJ9/NN4/N23 - FAMILY 2 SINGLE REAR METAL FUEL TANK
NK1/NJ2 - FAMILY 2 SINGLE MID-SHIP PLASTIC FUEL TANK
NG6 - FAMILY 2 DUAL FUEL TANKS
FAM2 - FAMILY 2
B3D - SCHOOL BUS
Fuel (LLY)
OBJECT ID h44022d
REVISION 001 STAGE Beta VERSION 0
LAST CHANGED BY 7:25:47 am Thursday, June 19, 2003
ORGANIZATION GMT560
GMT560 04i X &LLY
Panel Set: 1 schematic sheet1 12
$IVEDWORK/h44022d__001
Panel Set: 1

Heated Fuel/Water in Fuel — (LG4-'04i) 7.8L-Diesel/Duramax

04 560 000	JG	Beta - Initial Creation	02JA02
04 560 000	JG	Moved Rly to UH Center	04JA02
04 560 1167	JG	For connector 15344628: pins A,B,C to 1,2,3	19FE02
04 560 1179	JG	3-way Isuzu to Engine inline change	04MR02



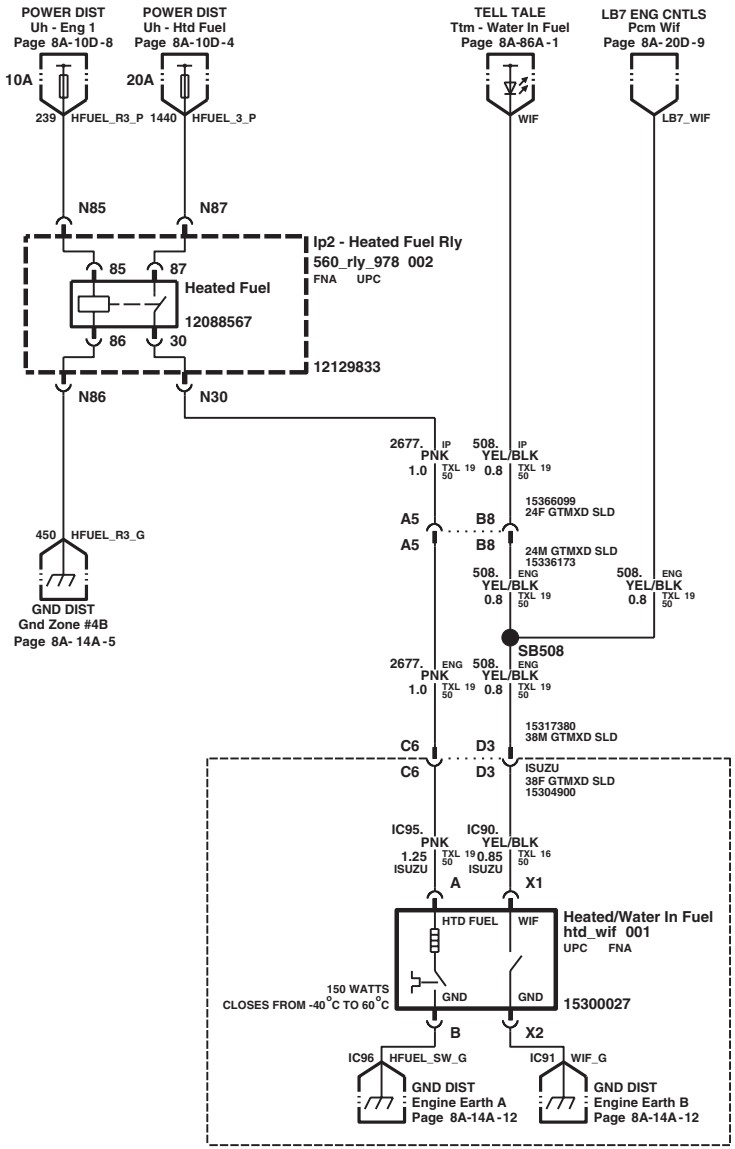
NWB/KUK

RPO LEGEND
NWB - WATER AND FUEL SEPARATOR
KUK - WATER IN FUEL

Heated Fuel/WIF (LG4)	OBJECT ID		REVISION	STAGE	VERSION	LAST CHANGED BY	7:58:53 am	ORGANIZATION
GMT560 04i X	h44023b		001	Beta	0			GMT560
Panel Set: 1 schematic sheet1 16	$IVEDWORK/h44023b__001					Thursday, August 15, 2002		Panel Set: 1

Heated Fuel/Water in Fuel — (LLY) 6.6L-Diesel/Duramax

04 560 000	JG	Beta - Initial Creation	04JA02	001
04i 560 1198	JG	Changed LB7 to LLY	27MR02	001

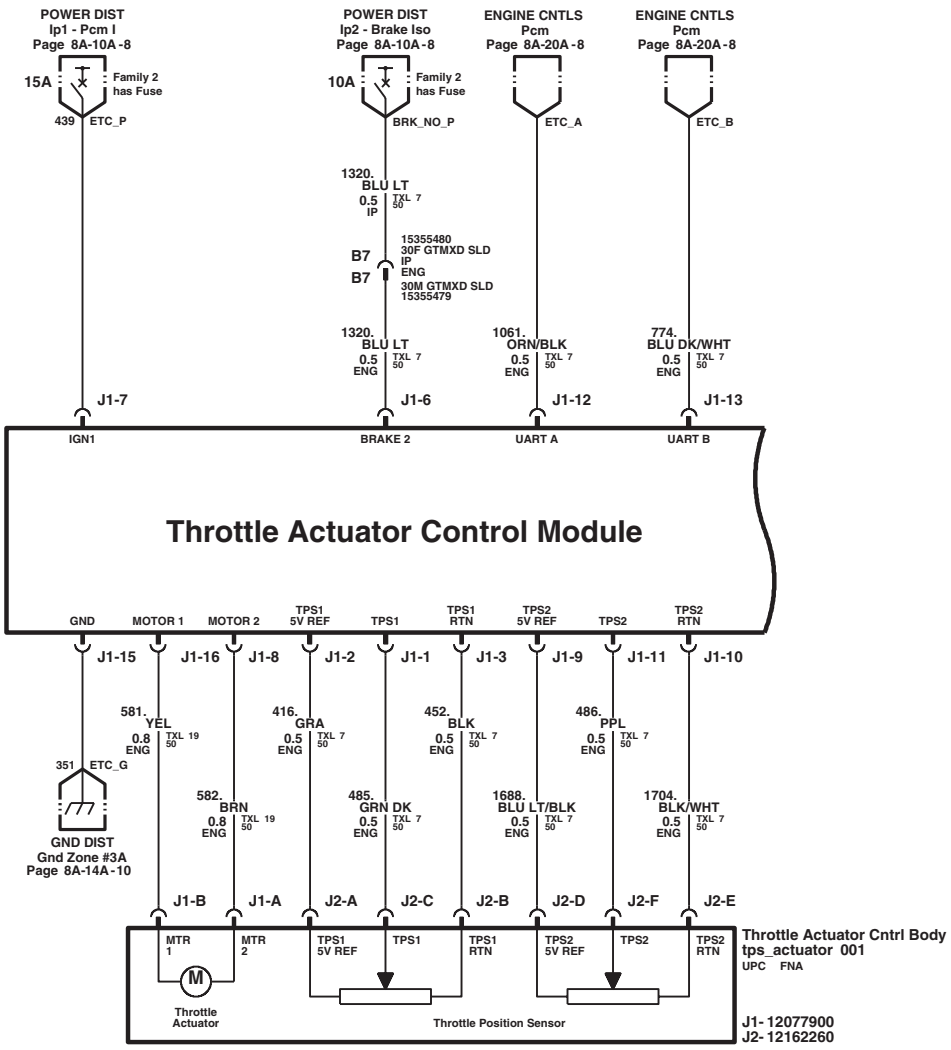


Heated Fuel/WIF (LLY)

OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY	7:59:56 am	ORGANIZATION
h44023d	001	Beta	0	Thursday, August 15, 2002		GMT560

GMT560 04i X &LLY — Panel Set: 1 — schematic — sheet1 9 — $IVEDWORK/h44023d__001 — Panel Set: 1

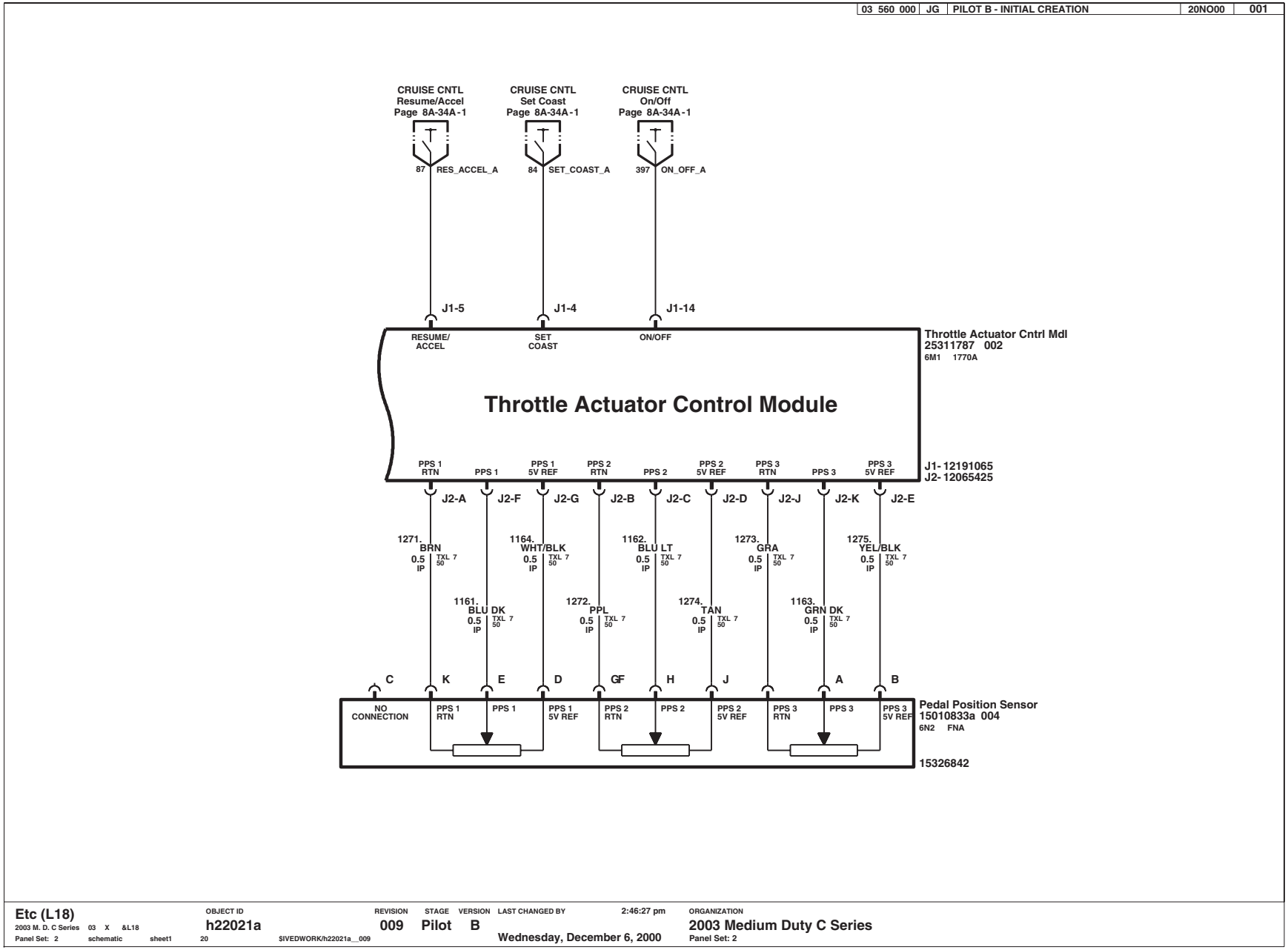
Electronic Throttle Control — (L18) 8.1L-Gas/NAPT



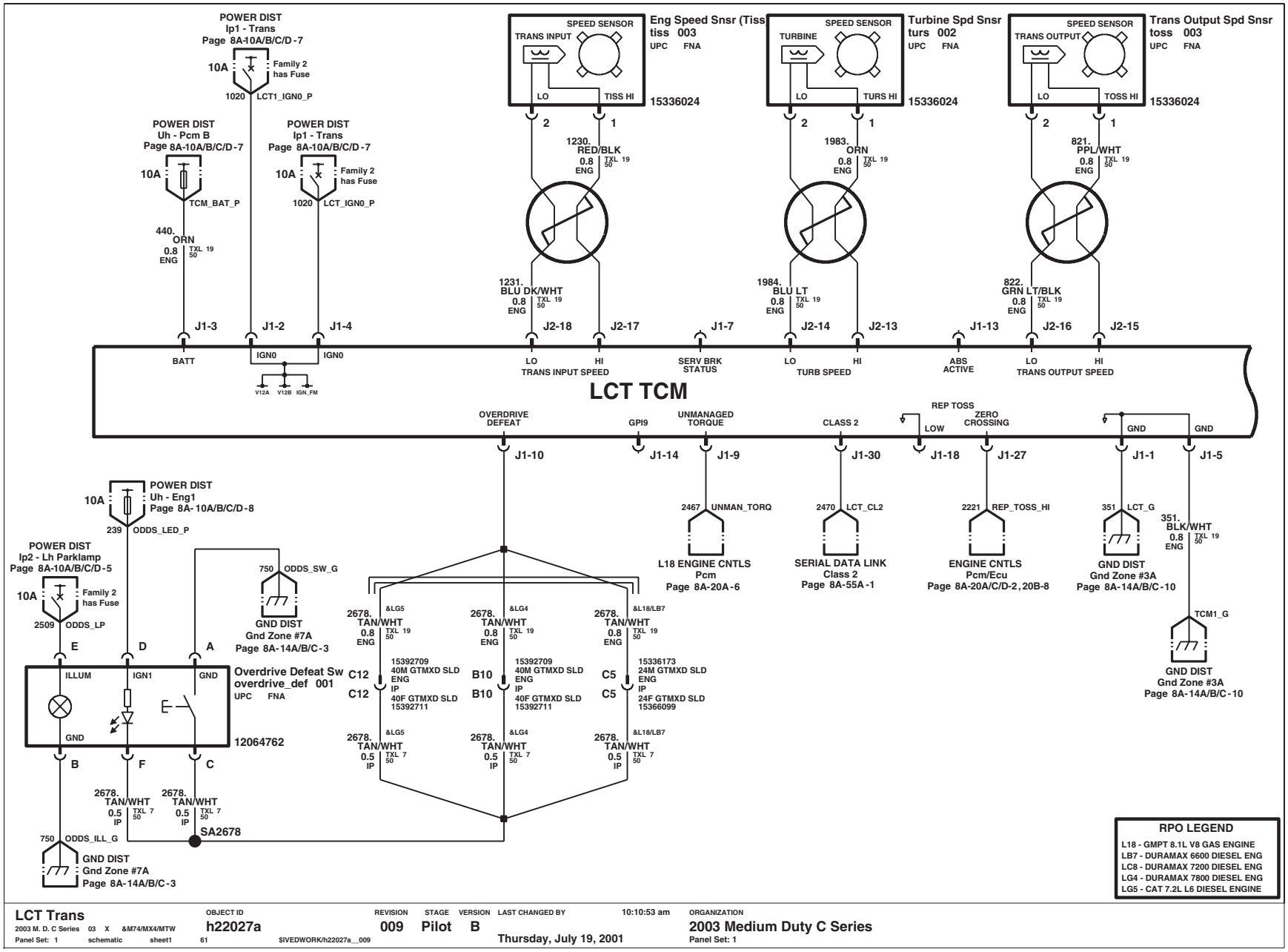
Etc (L18)
2003 M. D. C Series 03 X &L18
Panel Set: 1 schematic sheet1 20 $IVEDWORK/h22021a__009

OBJECT ID h22021a
REVISION 009
STAGE Pilot
VERSION B
LAST CHANGED BY
2:46:27 pm Wednesday, December 6, 2000
ORGANIZATION 2003 Medium Duty C Series
Panel Set: 1

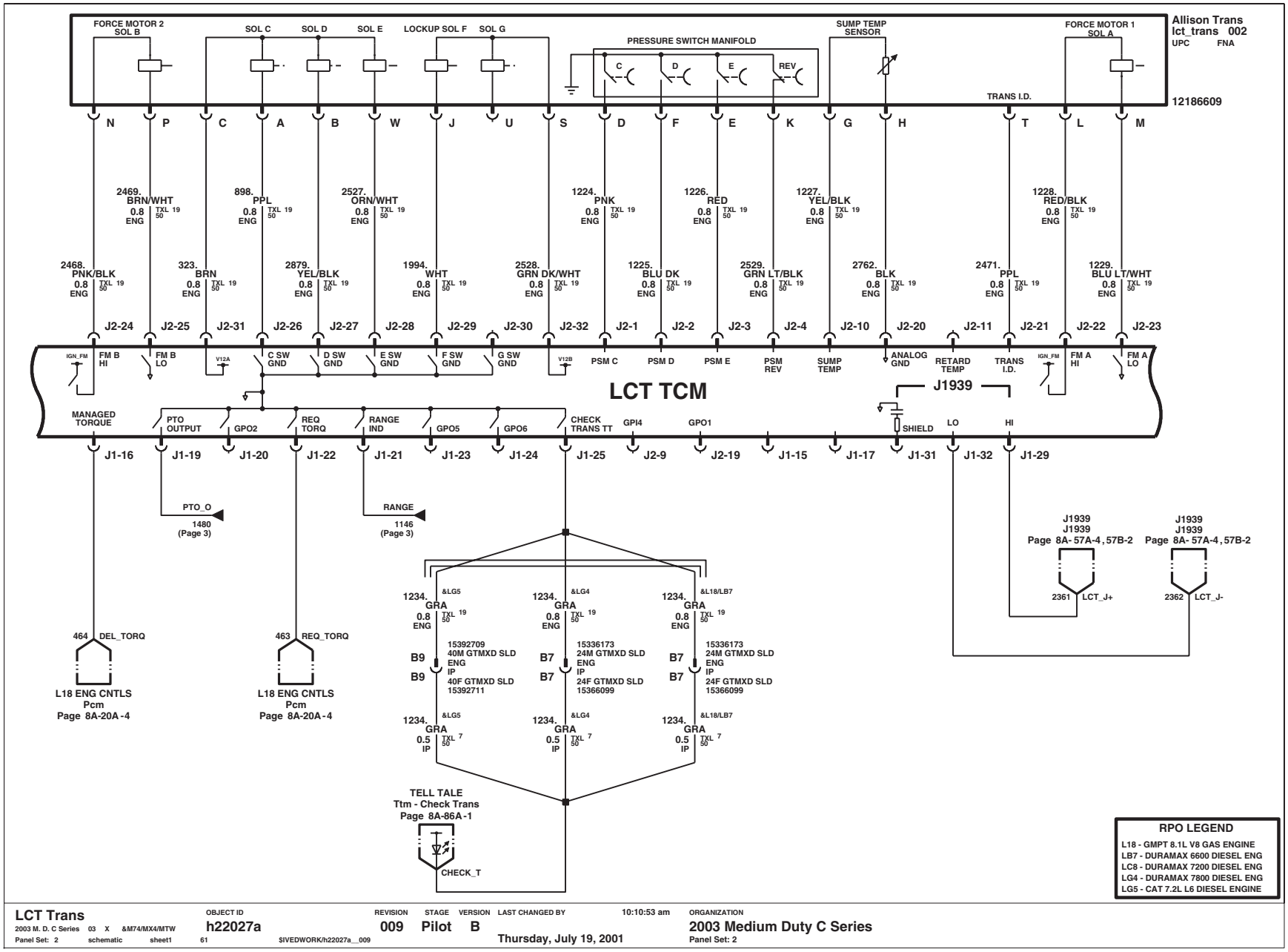
Electronic Throttle Control — (L18) 8.1L-Gas/NAPT



Automatic Transmission — TCM (LCT-'03-'04)

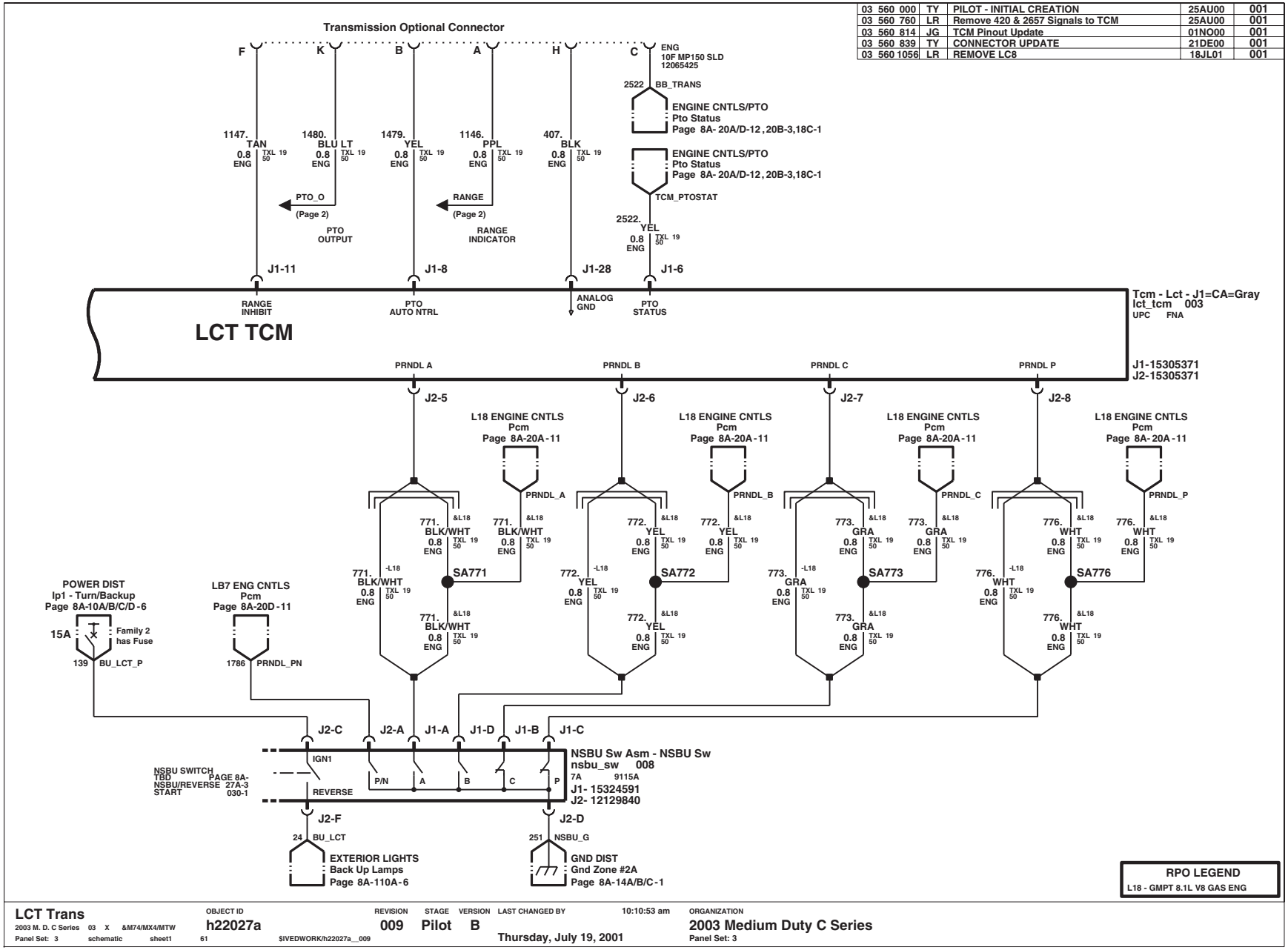


Automatic Transmission — TCM (LCT-'03-'04)



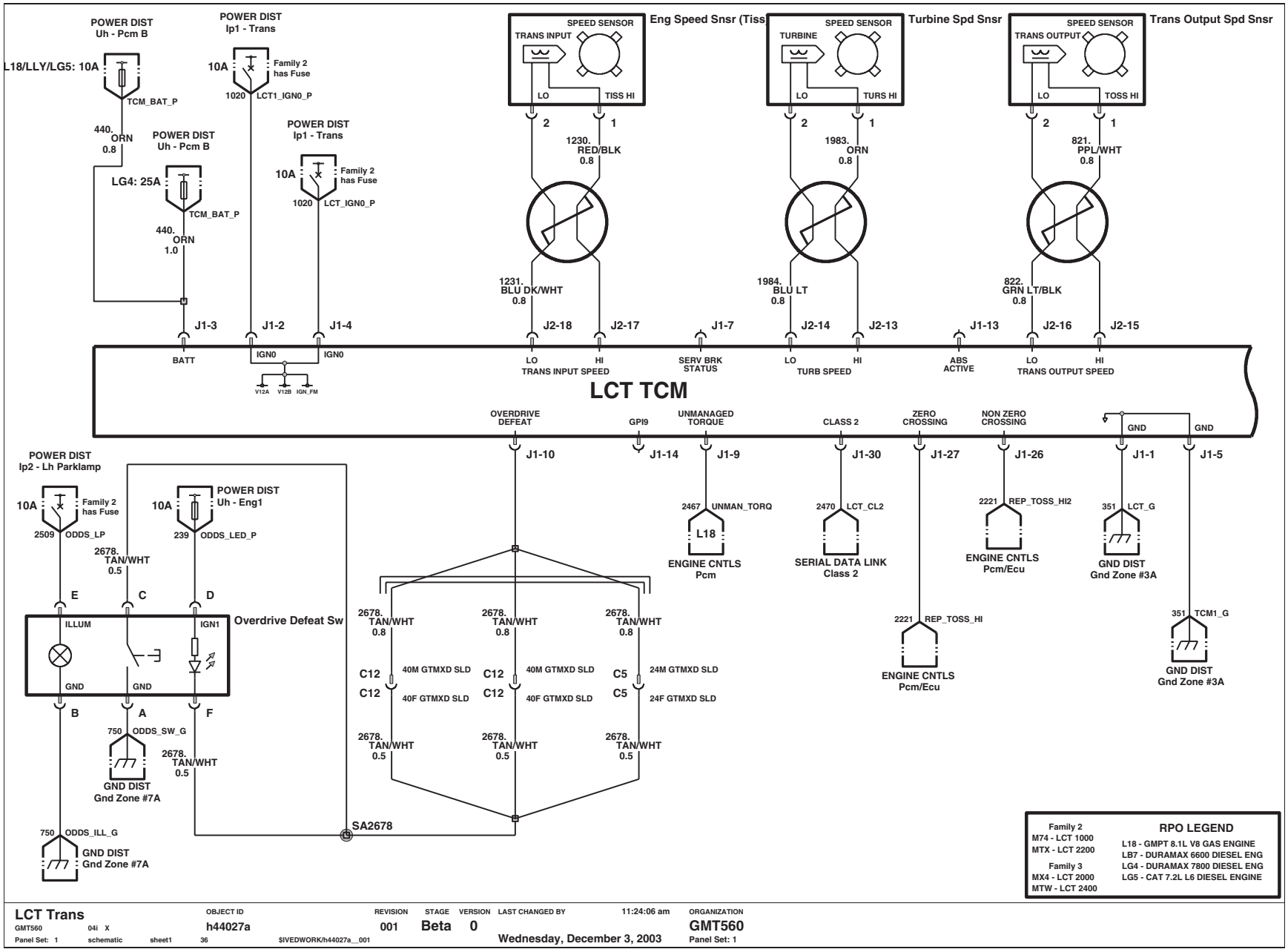
Automatic Transmission — TCM (LCT-'03-'04)

03 560 000	TY	PILOT - INITIAL CREATION	25AU00	001
03 560 760	LR	Remove 420 & 2657 Signals to TCM	25AU00	001
03 560 814	JG	TCM Pinout Update	01NO00	001
03 560 839	TY	CONNECTOR UPDATE	21DE00	001
03 560 1056	LR	REMOVE LC8	18JL01	001

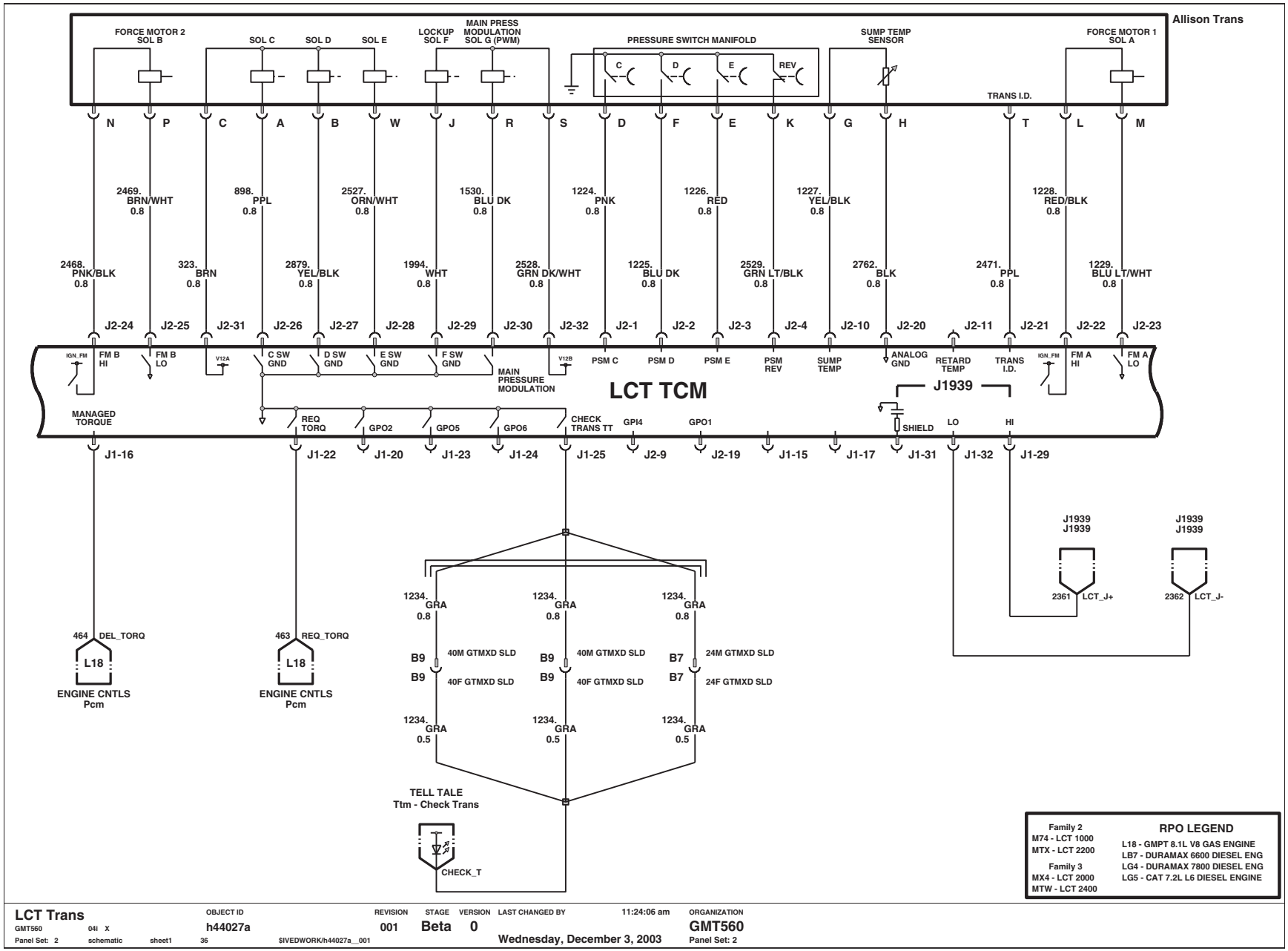


LCT Trans	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X &M74/MX4/MTW	h22027a	009	Pilot	B		10:10:53 am	2003 Medium Duty C Series
Panel Set: 3 schematic sheet1 61	SIVEDWORK/h22027a__009				Thursday, July 19, 2001		Panel Set: 3

Automatic Transmission — TCM (LCT-'04i)

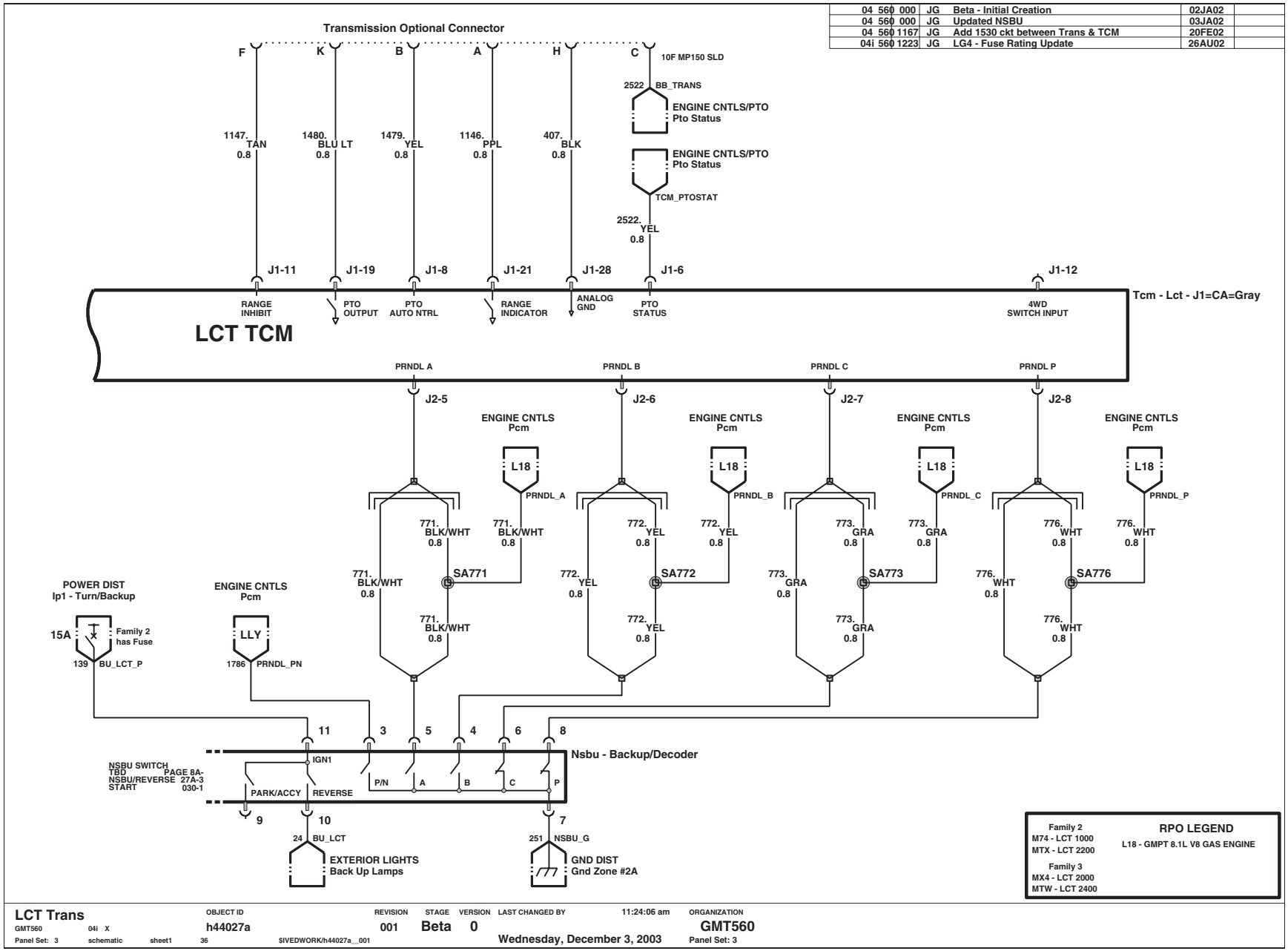


Automatic Transmission — TCM (LCT-'04i)

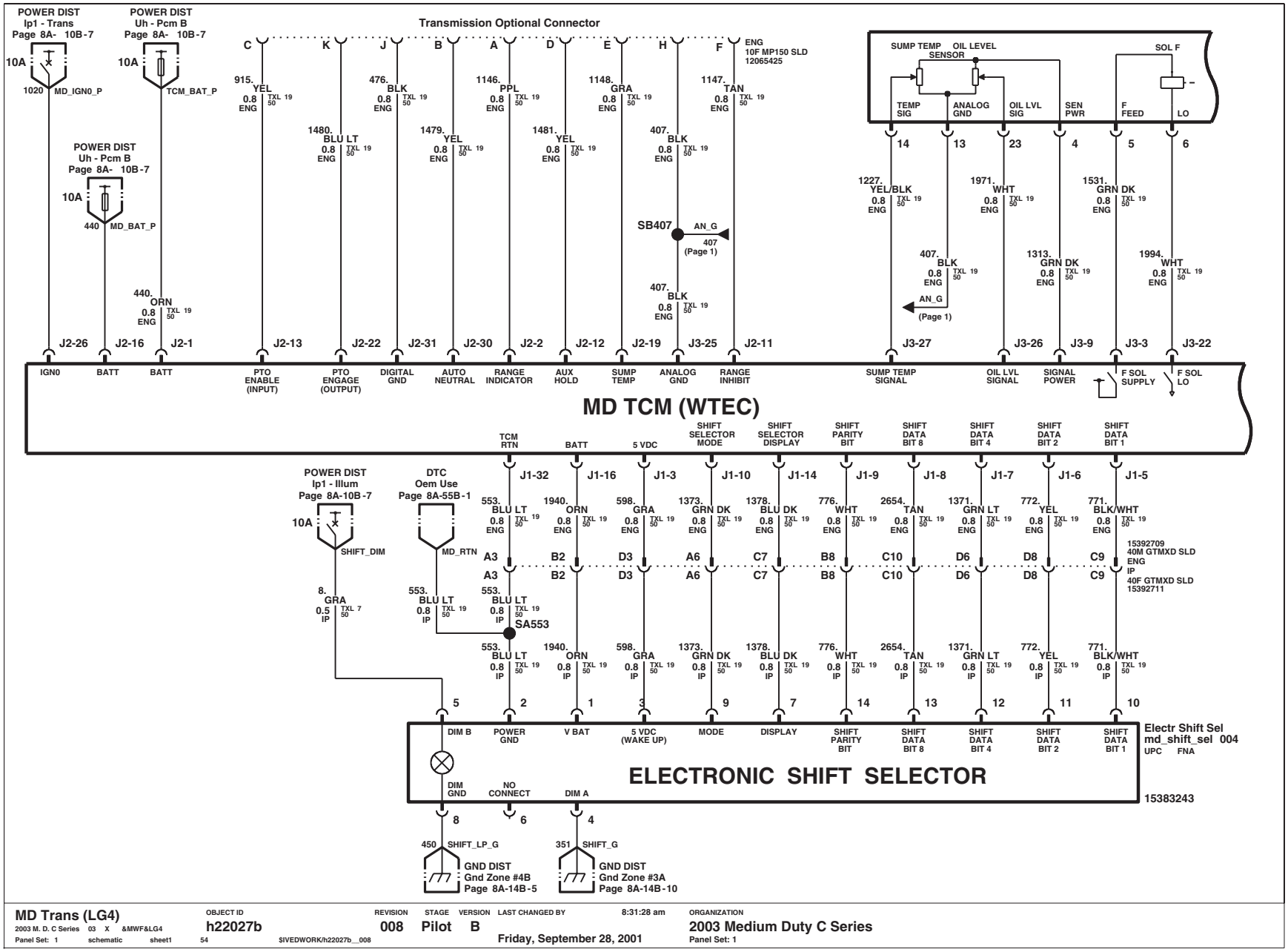


Automatic Transmission — TCM (LCT-'04i)

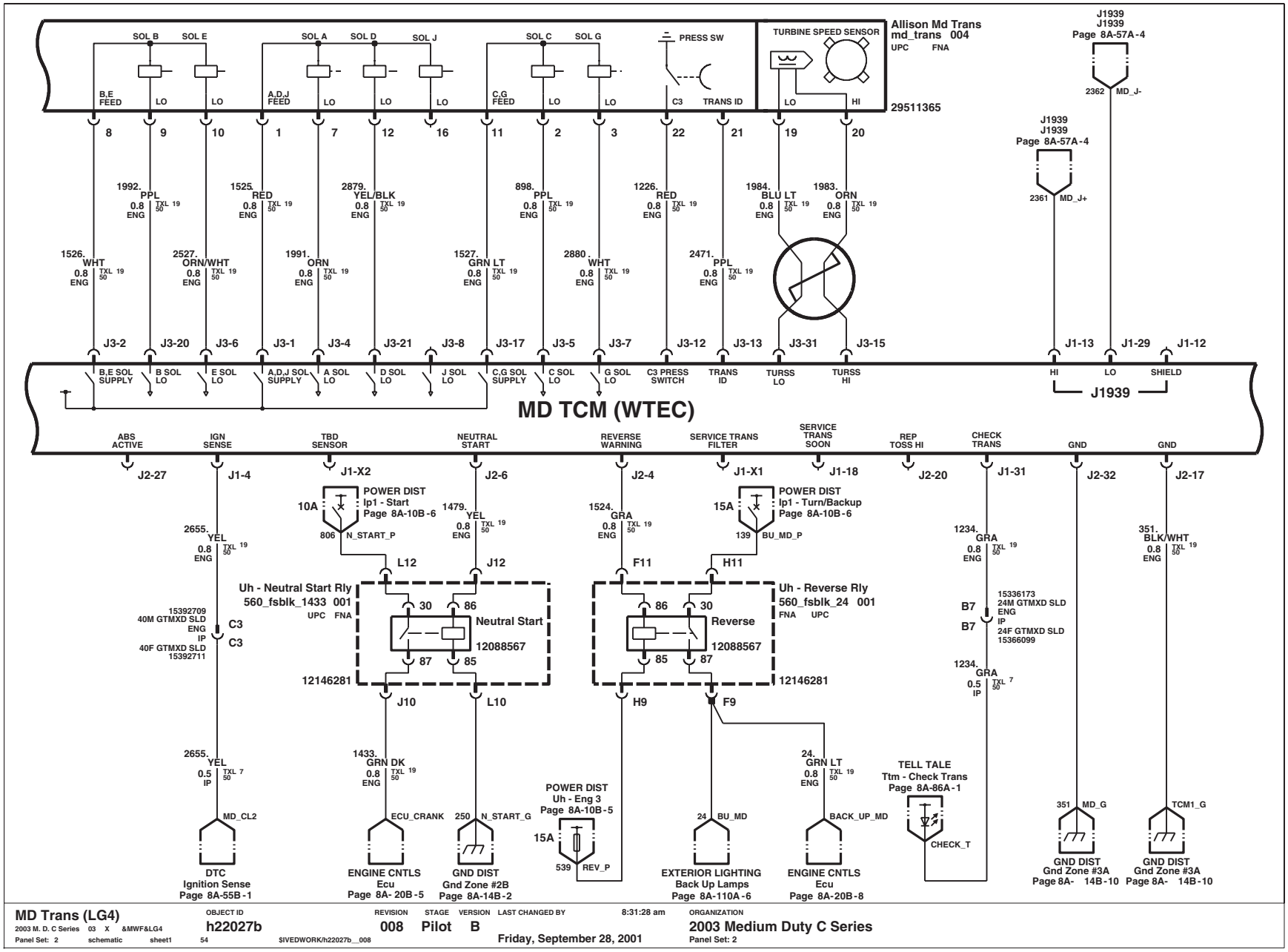
04 560 000	JG	Beta - Initial Creation	02JA02	
04 560 000	JG	Updated NSBU	03JA02	
04 560 1167	JG	Add 1530 ckt between Trans & TCM	20FE02	
04i 560 1223	JG	LG4 - Fuse Rating Update	26AU02	



Automatic Transmission — TCM MD Trans (LG4-'03-'04) 7.8L-Diesel/Duramax

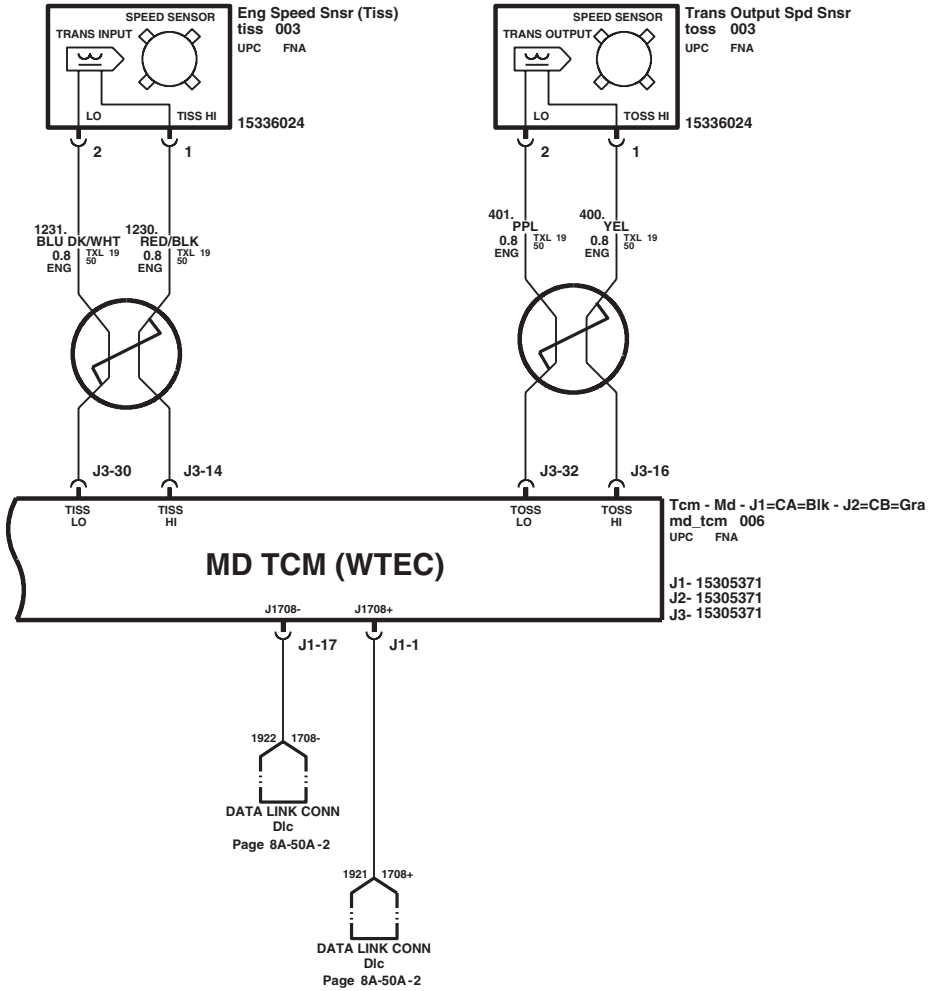

POWER DIST
Ip1 - Trans
Page 8A- 10B-7
10A
1020 MD_IGN0_P
POWER DIST
Uh - Pcm B
Page 8A- 10B-7
10A
TCM_BAT_P
POWER DIST
Uh - Pcm B
Page 8A- 10B-7
10A
440 MD_BAT_P
440. ORN 0.8 ENG TXL 19 50
Transmission Optional Connector
C K J B A D E H F
ENG
10F MP150 SLD
12065425
915. YEL 0.8 ENG TXL 19 50
1480. BLU LT 0.8 ENG TXL 19 50
476. BLK 0.8 ENG TXL 19 50
1479. YEL 0.8 ENG TXL 19 50
1146. PPL 0.8 ENG TXL 19 50
1481. YEL 0.8 ENG TXL 19 50
1148. GRA 0.8 ENG TXL 19 50
407. BLK 0.8 ENG TXL 19 50
1147. TAN 0.8 ENG TXL 19 50
SB407
AN_G
407
(Page 1)
407. BLK 0.8 ENG TXL 19 50
SUMP TEMP
OIL LEVEL SENSOR
SOL F
TEMP SIG
ANALOG GND
OIL LVL SIG
SEN PWR
F FEED
LO
14 13 23 4 5 6
1227. YEL/BLK 0.8 ENG TXL 19 50
1971. WHT 0.8 ENG TXL 19 50
1531. GRN DK 0.8 ENG TXL 19 50
407. BLK 0.8 ENG TXL 19 50
AN_G
(Page 1)
1313. GRN DK 0.8 ENG TXL 19 50
1994. WHT 0.8 ENG TXL 19 50
J2-26 J2-16 J2-1 J2-13 J2-22 J2-31 J2-30 J2-2 J2-12 J2-19 J3-25 J2-11
J3-27 J3-26 J3-9 J3-3 J3-22
IGN0 BATT BATT PTO ENABLE (INPUT) PTO ENGAGE (OUTPUT) DIGITAL GND AUTO NEUTRAL RANGE INDICATOR AUX HOLD SUMP TEMP ANALOG GND RANGE INHIBIT
SUMP TEMP SIGNAL OIL LVL SIGNAL SIGNAL POWER F SOL SUPPLY F SOL LO
MD TCM (WTEC)
TCM RTN BATT 5 VDC SHIFT SELECTOR MODE SHIFT SELECTOR DISPLAY SHIFT PARITY BIT SHIFT DATA BIT 8 SHIFT DATA BIT 4 SHIFT DATA BIT 2 SHIFT DATA BIT 1
J1-32 J1-16 J1-3 J1-10 J1-14 J1-9 J1-8 J1-7 J1-6 J1-5
POWER DIST
Ip1 - Illum
Page 8A-10B-7
10A
SHIFT_DIM
8. GRA 0.5 IP TXL 7 50
DTC
Oem Use
Page 8A-55B-1
MD_RTN
553. BLU LT 0.8 IP TXL 19 50
SA553
553. BLU LT 0.8 ENG TXL 19 50
1940. ORN 0.8 ENG TXL 19 50
598. GRA 0.8 ENG TXL 19 50
1373. GRN DK 0.8 ENG TXL 19 50
1378. BLU DK 0.8 ENG TXL 19 50
776. WHT 0.8 ENG TXL 19 50
2654. TAN 0.8 ENG TXL 19 50
1371. GRN LT 0.8 ENG TXL 19 50
772. YEL 0.8 ENG TXL 19 50
771. BLK/WHT 0.8 ENG TXL 19 50
A3 B2 D3 A6 C7 B8 C10 D6 D8 C9
15392709
40M GTMXD SLD
ENG
IP
40F GTMXD SLD
15392711
553. BLU LT 0.8 IP TXL 19 50
1940. ORN 0.8 IP TXL 19 50
598. GRA 0.8 IP TXL 19 50
1373. GRN DK 0.8 IP TXL 19 50
1378. BLU DK 0.8 IP TXL 19 50
776. WHT 0.8 IP TXL 19 50
2654. TAN 0.8 IP TXL 19 50
1371. GRN LT 0.8 IP TXL 19 50
772. YEL 0.8 IP TXL 19 50
771. BLK/WHT 0.8 IP TXL 19 50
5 2 1 3 9 7 14 13 12 11 10
DIM B POWER GND V BAT 5 VDC (WAKE UP) MODE DISPLAY SHIFT PARITY BIT SHIFT DATA BIT 8 SHIFT DATA BIT 4 SHIFT DATA BIT 2 SHIFT DATA BIT 1
Electr Shift Sel
md_shift_sel 004
UPC FNA
ELECTRONIC SHIFT SELECTOR
15383243
DIM GND NO CONNECT DIM A
8 6 4
450 SHIFT_LP_G
GND DIST
Gnd Zone #4B
Page 8A-14B-5
351 SHIFT_G
GND DIST
Gnd Zone #3A
Page 8A-14B-10
MD Trans (LG4)
2003 M. D. C Series 03 X &MWF&LG4
Panel Set: 1 schematic sheet1 54
OBJECT ID h22027b
$IVEDWORK/h22027b__008
REVISION 008
STAGE Pilot
VERSION B
LAST CHANGED BY
8:31:28 am
Friday, September 28, 2001
ORGANIZATION
2003 Medium Duty C Series
Panel Set: 1

Automatic Transmission — TCM MD Trans (LG4-'03-'04) 7.8L-Diesel/Duramax



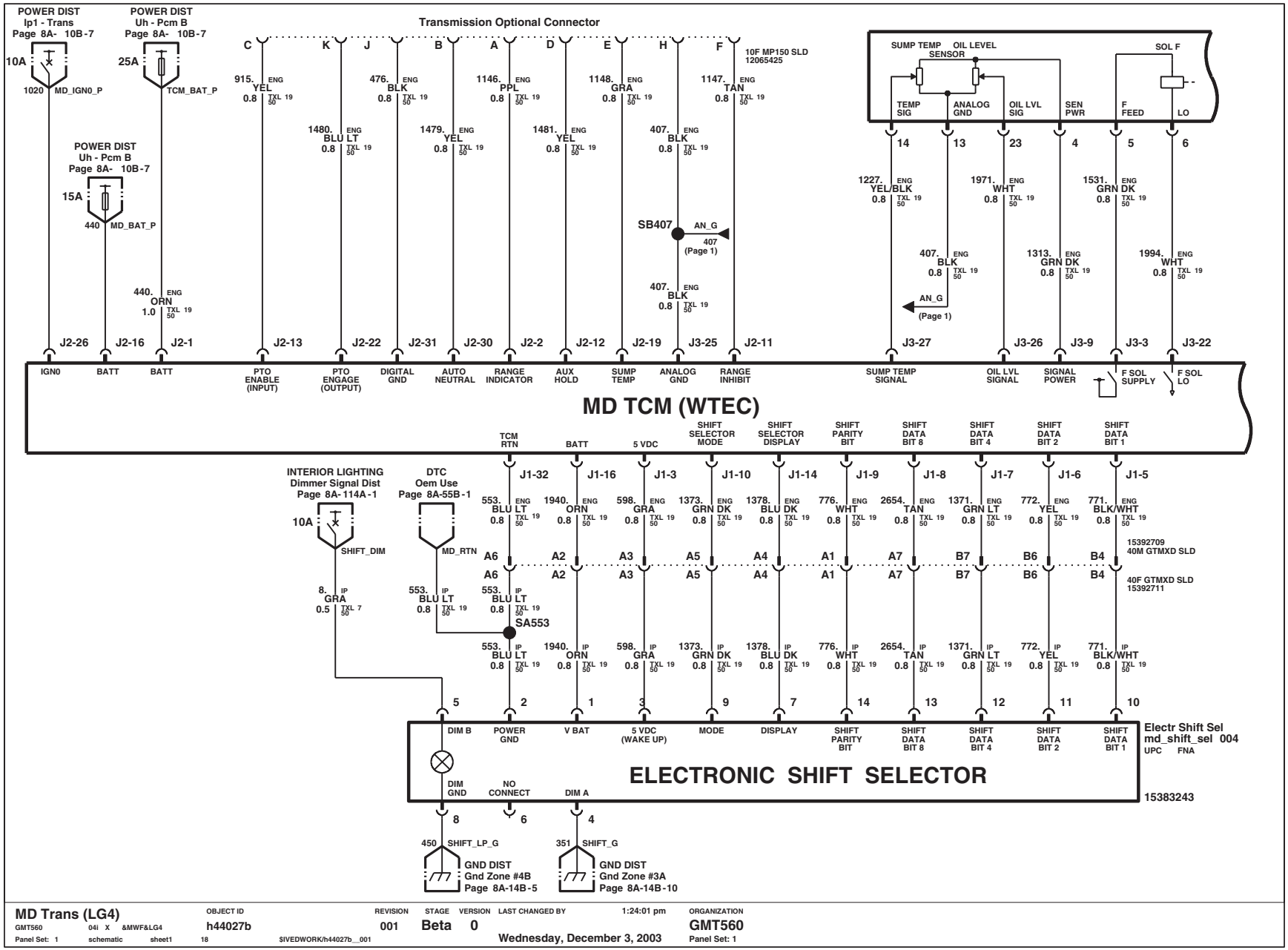
Automatic Transmission — TCM MD Trans (LG4-'03-'04) 7.8L-Diesel/Duramax

03 560 000	TY	PILOT - INITIAL CREATION	25AU00	001
03 560 760	LR	Remove 420 & 2657 Signals to TCM	25AU00	001
03 560 839	TY	CONNECTOR UPDATE	21DE00	001
03 560 1055	LR	PTO Update	18JL01	001
03 560 1109	JG	Double Crimp Update	28SE01	001

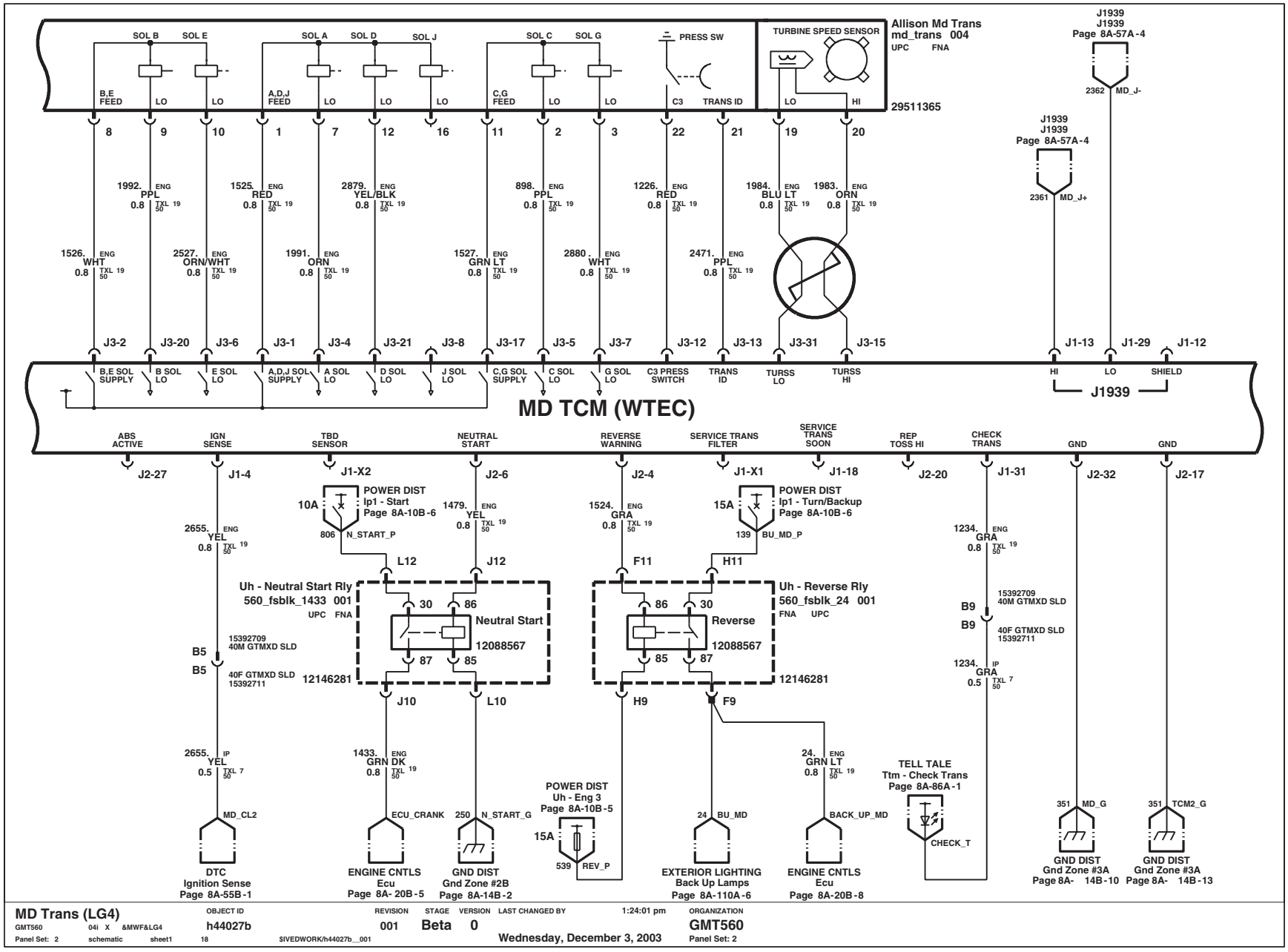


MD Trans (LG4)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY	8:31:28 am	ORGANIZATION	
2003 M. D. C Series 03 X &MWF&LG4	h22027b	008	Pilot	B			2003 Medium Duty C Series	
Panel Set: 3 schematic sheet1 54	$IVEDWORK/h22027b__008				Friday, September 28, 2001		Panel Set: 3	

Automatic Transmission — TCM MD Trans (LG4-'04i) 7.8L-Diesel/Duramax

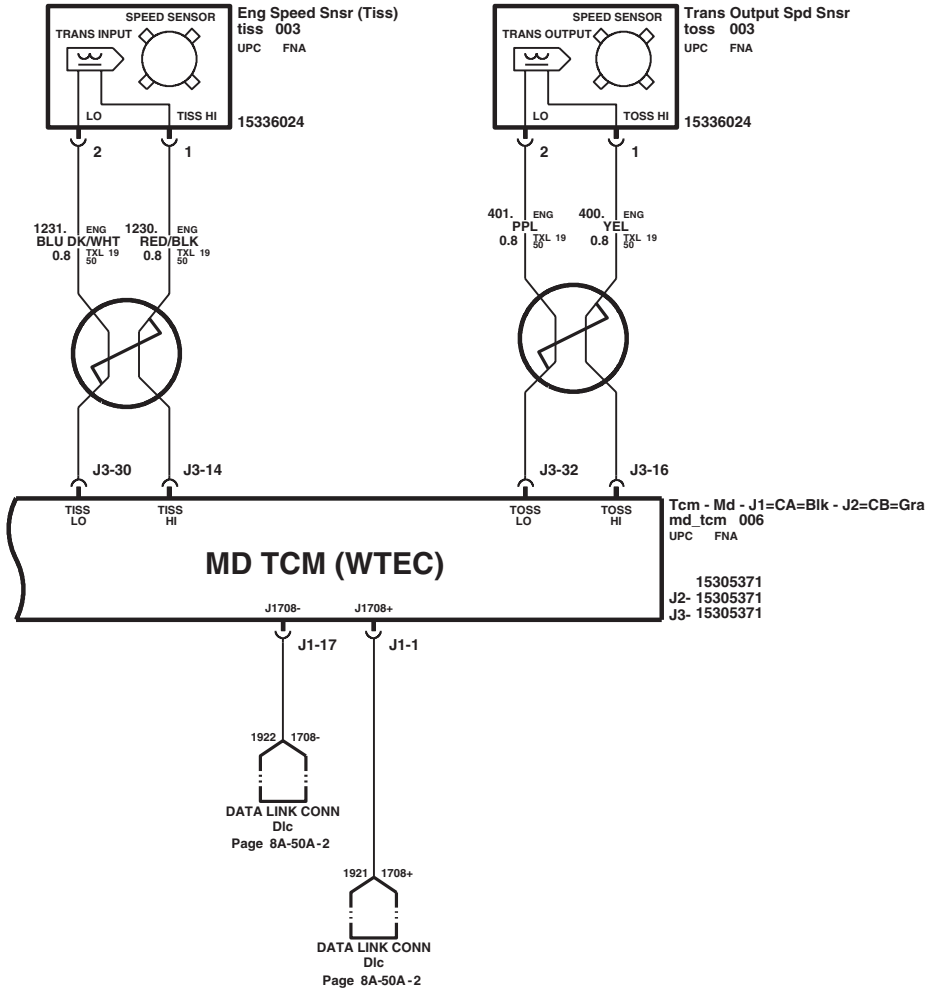


Automatic Transmission — TCM MD Trans (LG4-'04i) 7.8L-Diesel/Duramax



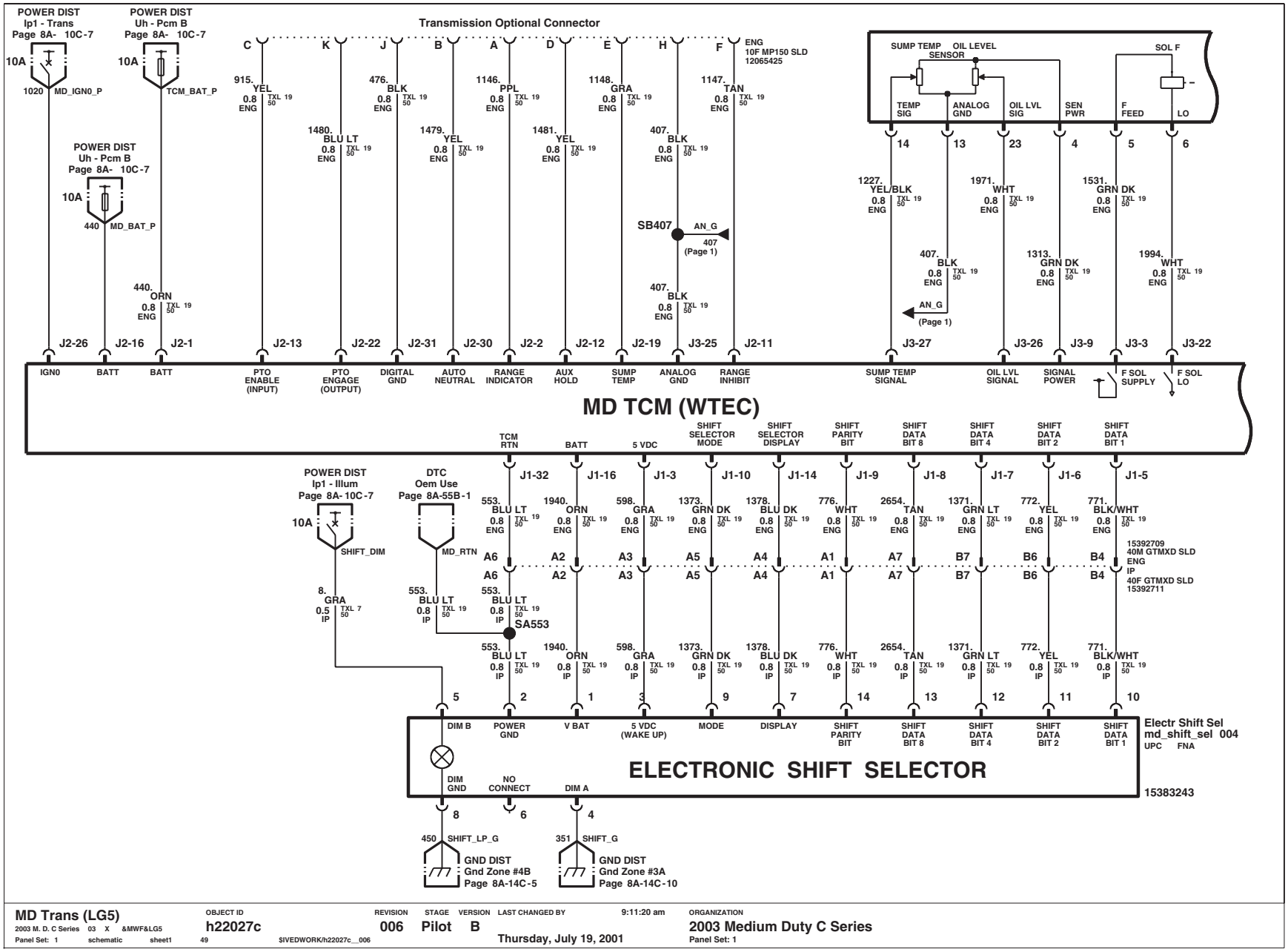
Automatic Transmission — TCM MD Trans (LG4-'04i) 7.8L-Diesel/Duramax

04	560	000	JG	Beta - Initial Creation	02JA02	001
04i	560	1223	JG	LG4 - Fuse Rating Update	26AU02	001



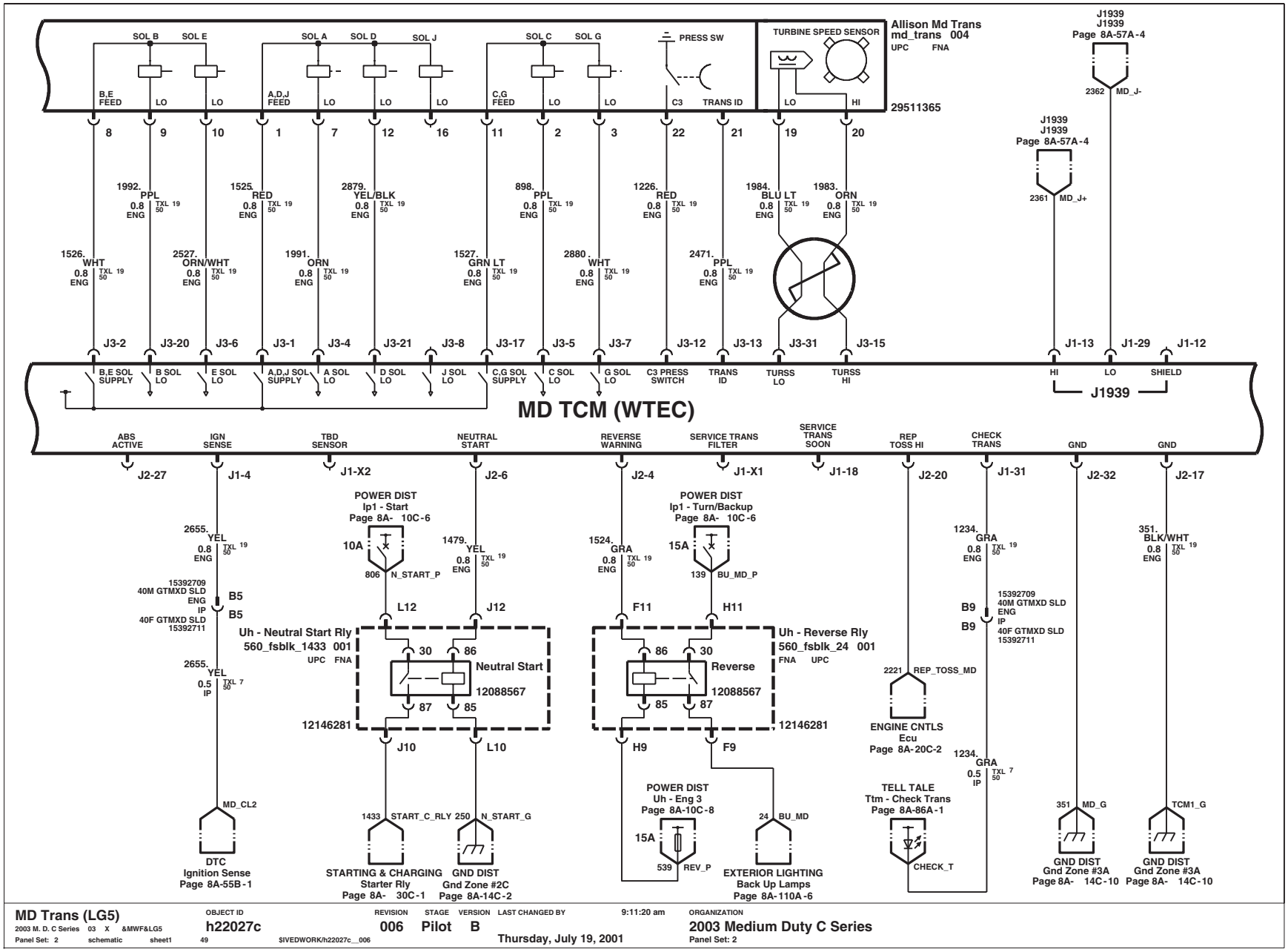
MD Trans (LG4)		OBJECT ID		REVISION	STAGE	VERSION	LAST CHANGED BY	1:24:01 pm	ORGANIZATION
GMT560	04i X &MWF&LG4	h44027b		001	Beta	0			GMT560
Panel Set: 3	schematic	sheet1	18	$IVEDWORK/h44027b__001			Wednesday, December 3, 2003		Panel Set: 3

Automatic Transmission — TCM MD Trans (LG5) 7.2L-Diesel/CAT


POWER DIST
Ip1 - Trans
Page 8A- 10C-7
10A
1020 MD_IGN0_P
POWER DIST
Uh - Pcm B
Page 8A- 10C-7
10A
TCM_BAT_P
POWER DIST
Uh - Pcm B
Page 8A- 10C-7
10A
440 MD_BAT_P
Transmission Optional Connector
C K J B A D E H F
ENG
10F MP150 SLD
12065425
915. YEL 0.8 ENG TXL 19 50
1480. BLU LT 0.8 ENG TXL 19 50
476. BLK 0.8 ENG TXL 19 50
1479. YEL 0.8 ENG TXL 19 50
1146. PPL 0.8 ENG TXL 19 50
1481. YEL 0.8 ENG TXL 19 50
1148. GRA 0.8 ENG TXL 19 50
407. BLK 0.8 ENG TXL 19 50
1147. TAN 0.8 ENG TXL 19 50
SB407
AN_G
407
(Page 1)
440. ORN 0.8 ENG TXL 19 50
407. BLK 0.8 ENG TXL 19 50
SUMP TEMP OIL LEVEL SENSOR
SOL F
TEMP SIG
ANALOG GND
OIL LVL SIG
SEN PWR
F FEED
LO
14 13 23 4 5 6
1227. YEL/BLK 0.8 ENG TXL 19 50
1971. WHT 0.8 ENG TXL 19 50
1531. GRN DK 0.8 ENG TXL 19 50
407. BLK 0.8 ENG TXL 19 50
AN_G
(Page 1)
1313. GRN DK 0.8 ENG TXL 19 50
1994. WHT 0.8 ENG TXL 19 50
J2-26 J2-16 J2-1 J2-13 J2-22 J2-31 J2-30 J2-2 J2-12 J2-19 J3-25 J2-11
J3-27 J3-26 J3-9 J3-3 J3-22
IGN0 BATT BATT PTO ENABLE (INPUT) PTO ENGAGE (OUTPUT) DIGITAL GND AUTO NEUTRAL RANGE INDICATOR AUX HOLD SUMP TEMP ANALOG GND RANGE INHIBIT
SUMP TEMP SIGNAL OIL LVL SIGNAL SIGNAL POWER F SOL SUPPLY F SOL LO
MD TCM (WTEC)
TCM RTN BATT 5 VDC SHIFT SELECTOR MODE SHIFT SELECTOR DISPLAY SHIFT PARITY BIT SHIFT DATA BIT 8 SHIFT DATA BIT 4 SHIFT DATA BIT 2 SHIFT DATA BIT 1
J1-32 J1-16 J1-3 J1-10 J1-14 J1-9 J1-8 J1-7 J1-6 J1-5
POWER DIST
Ip1 - Illum
Page 8A- 10C-7
10A
SHIFT_DIM
DTC
Oem Use
Page 8A-55B-1
MD_RTN
8. GRA 0.5 IP TXL 7 50
553. BLU LT 0.8 IP TXL 19 50
SA553
553. BLU LT 0.8 ENG TXL 19 50
1940. ORN 0.8 ENG TXL 19 50
598. GRA 0.8 ENG TXL 19 50
1373. GRN DK 0.8 ENG TXL 19 50
1378. BLU DK 0.8 ENG TXL 19 50
776. WHT 0.8 ENG TXL 19 50
2654. TAN 0.8 ENG TXL 19 50
1371. GRN LT 0.8 ENG TXL 19 50
772. YEL 0.8 ENG TXL 19 50
771. BLK/WHT 0.8 ENG TXL 19 50
A6 A2 A3 A5 A4 A1 A7 B7 B6 B4
15392709
40M GTMXD SLD
ENG
IP
40F GTMXD SLD
15392711
5 2 1 3 9 7 14 13 12 11 10
DIM B POWER GND V BAT 5 VDC (WAKE UP) MODE DISPLAY SHIFT PARITY BIT SHIFT DATA BIT 8 SHIFT DATA BIT 4 SHIFT DATA BIT 2 SHIFT DATA BIT 1
Electr Shift Sel
md_shift_sel 004
UPC FNA
ELECTRONIC SHIFT SELECTOR
15383243
DIM GND NO CONNECT DIM A
8 6 4
450 SHIFT_LP_G
GND DIST
Gnd Zone #4B
Page 8A-14C-5
351 SHIFT_G
GND DIST
Gnd Zone #3A
Page 8A-14C-10

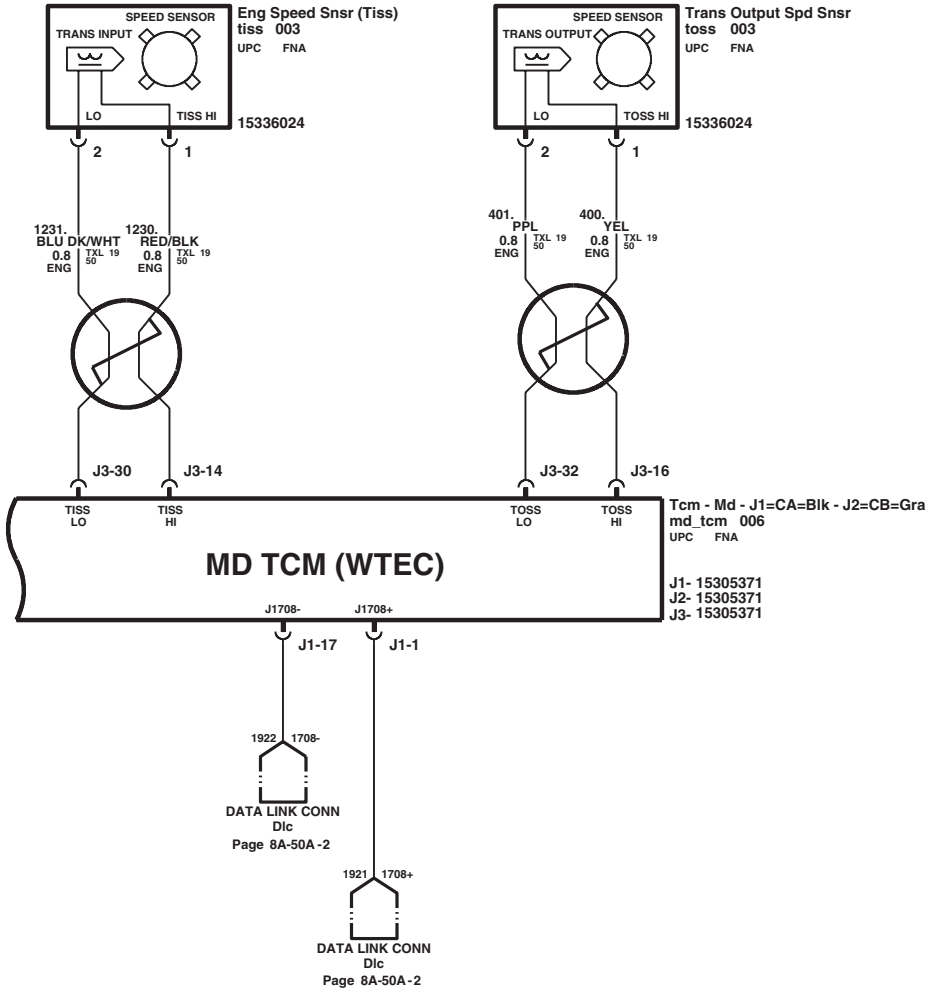
MD Trans (LG5)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X &MWF&LG5	h22027c	006	Pilot	B	9:11:20 am		2003 Medium Duty C Series
Panel Set: 1 schematic sheet1 49	$IVEDWORK/h22027c__006				Thursday, July 19, 2001		Panel Set: 1

Automatic Transmission — TCM MD Trans (LG5) 7.2L-Diesel/CAT



Automatic Transmission — TCM MD Trans (LG5) 7.2L-Diesel/CAT

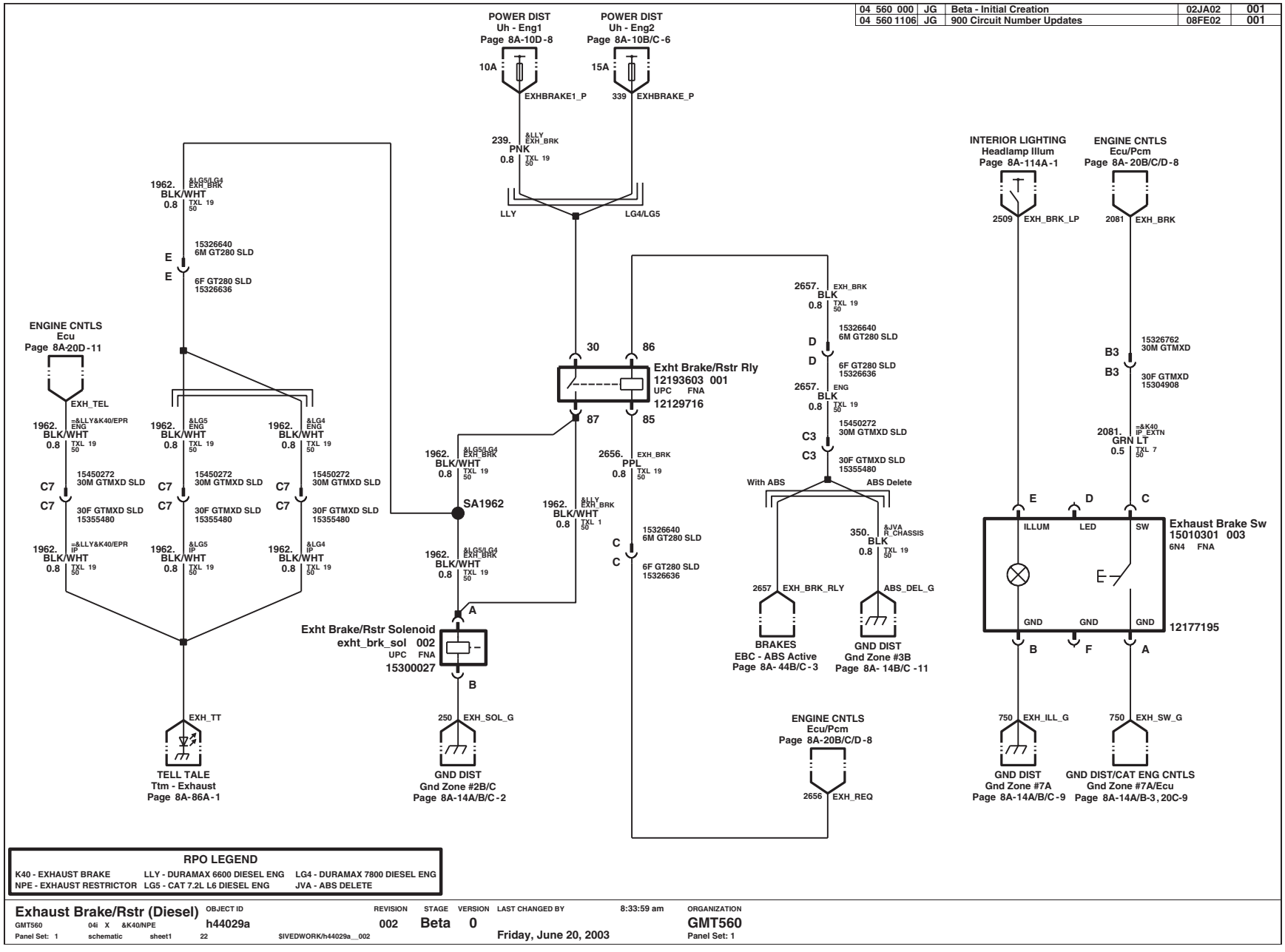
03 560 000	TY	PILOT - INITIAL CREATION	25AU00	001
03 560 760	LR	Remove 420 & 2657 Signals to TCM	25AU00	001
03 560 1055	LR	PTO Update	18JL01	001



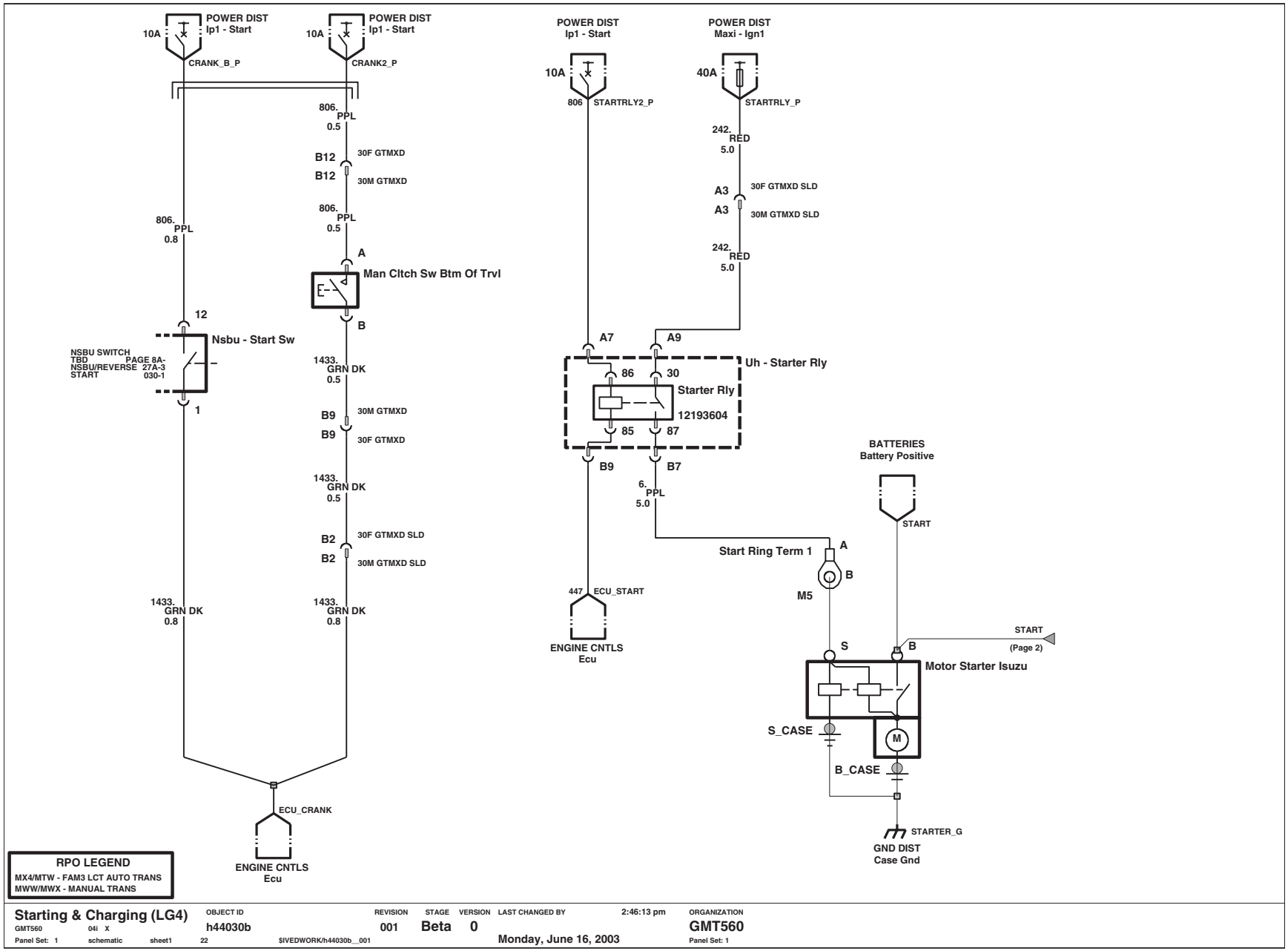
MD Trans (LG5)
2003 M. D. C Series 03 X &MWF&LG5
Panel Set: 3 schematic sheet1 49 $IVEDWORK/h22027c__006

OBJECT ID h22027c
REVISION 006
STAGE Pilot
VERSION 0
LAST CHANGED BY
9:11:20 am Thursday, July 19, 2001
ORGANIZATION 2003 Medium Duty C Series
Panel Set: 3

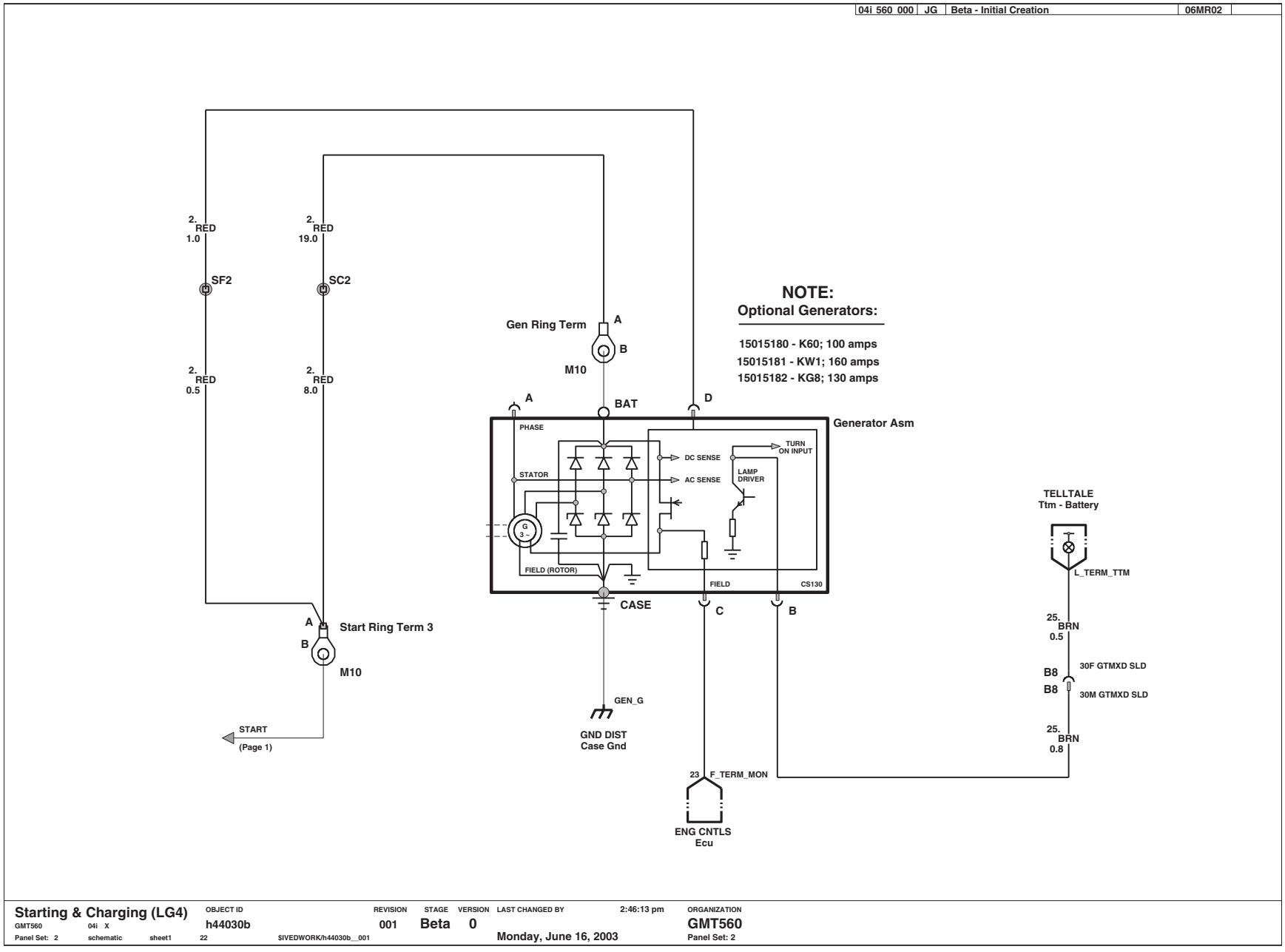
Exhaust Brake/Restrictor (Diesel) — (LLY) 6.6L-Duramax — (LG4) 7.8L-Duramax — (LG5) 7.2L CAT


04 560 000 JG Beta - Initial Creation 02JA02 001
04 560 1106 JG 900 Circuit Number Updates 08FE02 001
POWER DIST Uh - Eng1 Page 8A-10D-8
POWER DIST Uh - Eng2 Page 8A-10B/C-6
10A
15A
EXHBRAKE1_P
339 EXHBRAKE_P
239. &LLY EXH_BRK PNK 0.8 TXL 19 50
LLY
LG4/LG5
INTERIOR LIGHTING Headlamp Illum Page 8A-114A-1
ENGINE CNTLS Ecu/Pcm Page 8A-20B/C/D-8
2509 EXH_BRK_LP
2081 EXH_BRK
1962. &LG5/LG4 EXH_BRK BLK/WHT 0.8 TXL 19 50
15326640 6M GT280 SLD
6F GT280 SLD 15326636
ENGINE CNTLS Ecu Page 8A-20D-11
EXH_TEL
1962. =&LLY&K40/EPR ENG BLK/WHT 0.8 TXL 19 50
1962. &LG5 ENG BLK/WHT 0.8 TXL 19 50
1962. &LG4 ENG BLK/WHT 0.8 TXL 19 50
15450272 30M GTMXD SLD
30F GTMXD SLD 15355480
1962. =&LLY&K40/EPR IP BLK/WHT 0.8 TXL 19 50
1962. &LG5 IP BLK/WHT 0.8 TXL 19 50
1962. &LG4 IP BLK/WHT 0.8 TXL 19 50
30
86
87
85
Exht Brake/Rstr Rly 12193603 001 UPC FNA 12129716
2657. EXH_BRK BLK 0.8 TXL 19 50
2657. ENG BLK 0.8 TXL 19 50
15450272 30M GTMXD SLD
30F GTMXD SLD 15355480
With ABS
ABS Delete
2656. EXH_BRK PPL 0.8 TXL 19 50
1962. &LLY EXH_BRK BLK/WHT 0.8 TXL 1 50
15326640 6M GT280 SLD
6F GT280 SLD 15326636
SA1962
350. &JVA P_CHASSIS BLK 0.8 TXL 19 50
2657 EXH_BRK_RLY
ABS_DEL_G
BRAKES EBC - ABS Active Page 8A-44B/C-3
GND DIST Gnd Zone #3B Page 8A-14B/C-11
Exht Brake/Rstr Solenoid exht_brk_sol 002 UPC FNA 15300027
A
B
250 EXH_SOL_G
EXH_TT
TELL TALE Ttm - Exhaust Page 8A-86A-1
GND DIST Gnd Zone #2B/C Page 8A-14A/B/C-2
ENGINE CNTLS Ecu/Pcm Page 8A-20B/C/D-8
2656 EXH_REQ
15326762 30M GTMXD
30F GTMXD 15304908
2081. =&K40 IP_EXTN GRN LT 0.5 TXL 7 50
E D C
ILLUM LED SW
Exhaust Brake Sw 15010301 003 6N4 FNA
GND GND GND
12177195
B F A
750 EXH_ILL_G
750 EXH_SW_G
GND DIST Gnd Zone #7A Page 8A-14A/B/C-9
GND DIST/CAT ENG CNTLS Gnd Zone #7A/Ecu Page 8A-14A/B-3, 20C-9
RPO LEGEND
K40 - EXHAUST BRAKE
LLY - DURAMAX 6600 DIESEL ENG
LG4 - DURAMAX 7800 DIESEL ENG
NPE - EXHAUST RESTRICTOR
LG5 - CAT 7.2L L6 DIESEL ENG
JVA - ABS DELETE
Exhaust Brake/Rstr (Diesel)
OBJECT ID h44029a
REVISION 002
STAGE Beta
VERSION 0
LAST CHANGED BY
8:33:59 am
Friday, June 20, 2003
ORGANIZATION GMT560
GMT560 04i X &K40/NPE
Panel Set: 1 schematic sheet1 22
$IVEDWORK/h44029a__002
Panel Set: 1

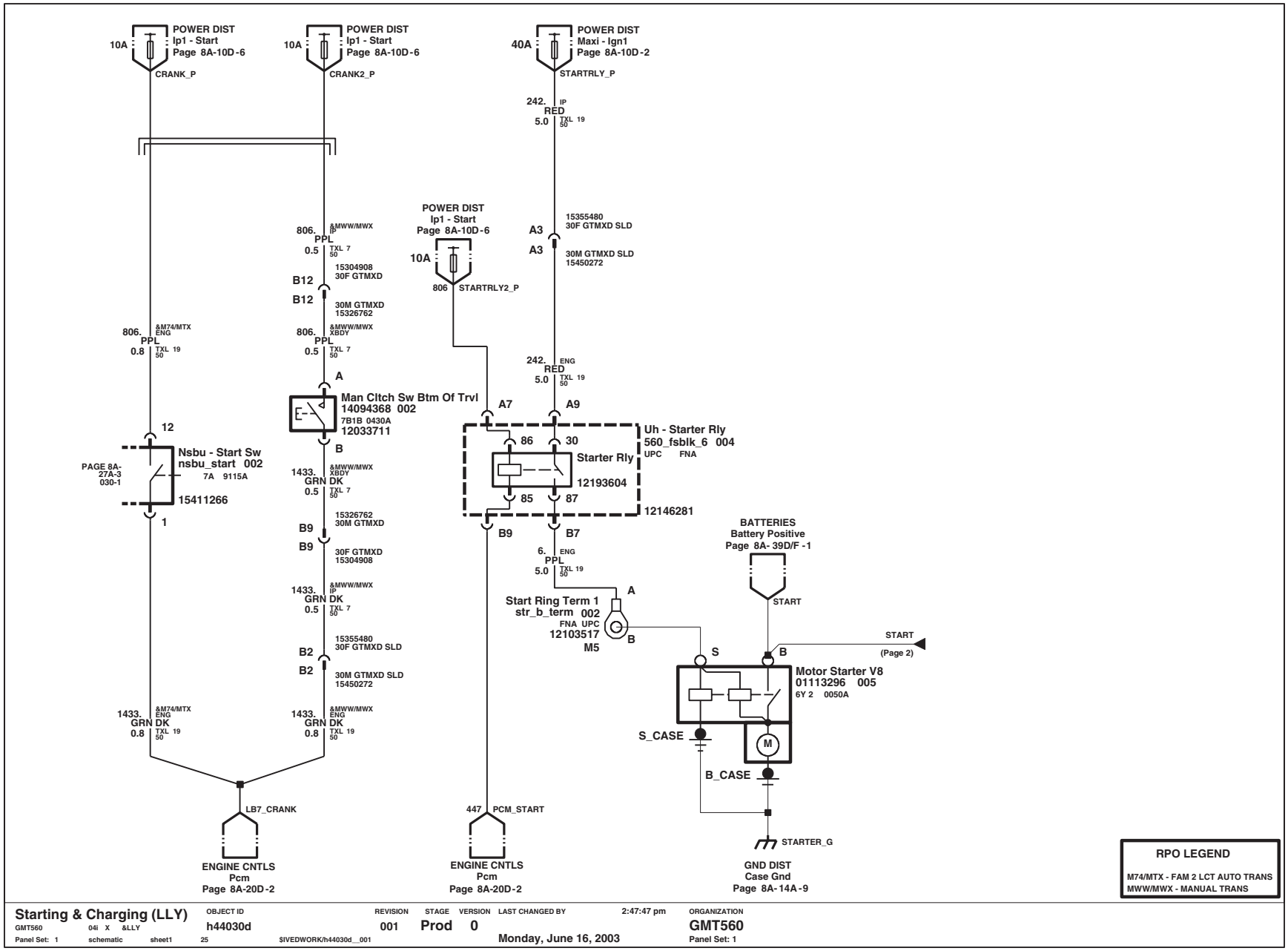
Starting & Charging — (LG4-'04i) 7.8L-Diesel/Duramax



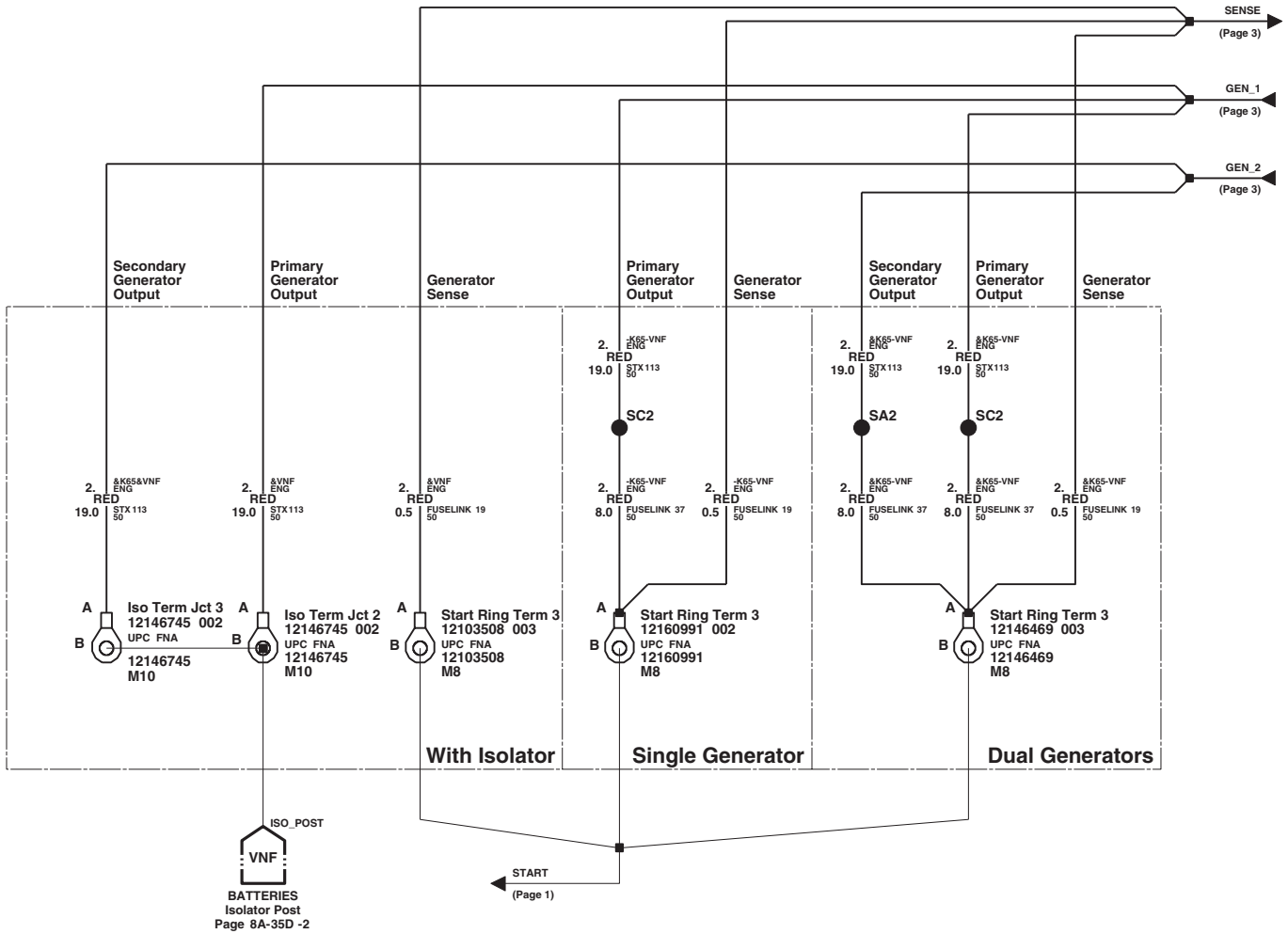
Starting & Charging — (LG4-'04i) 7.8L-Diesel/Duramax



Starting & Charging — (LLY) 6.6L-Diesel/Duramax

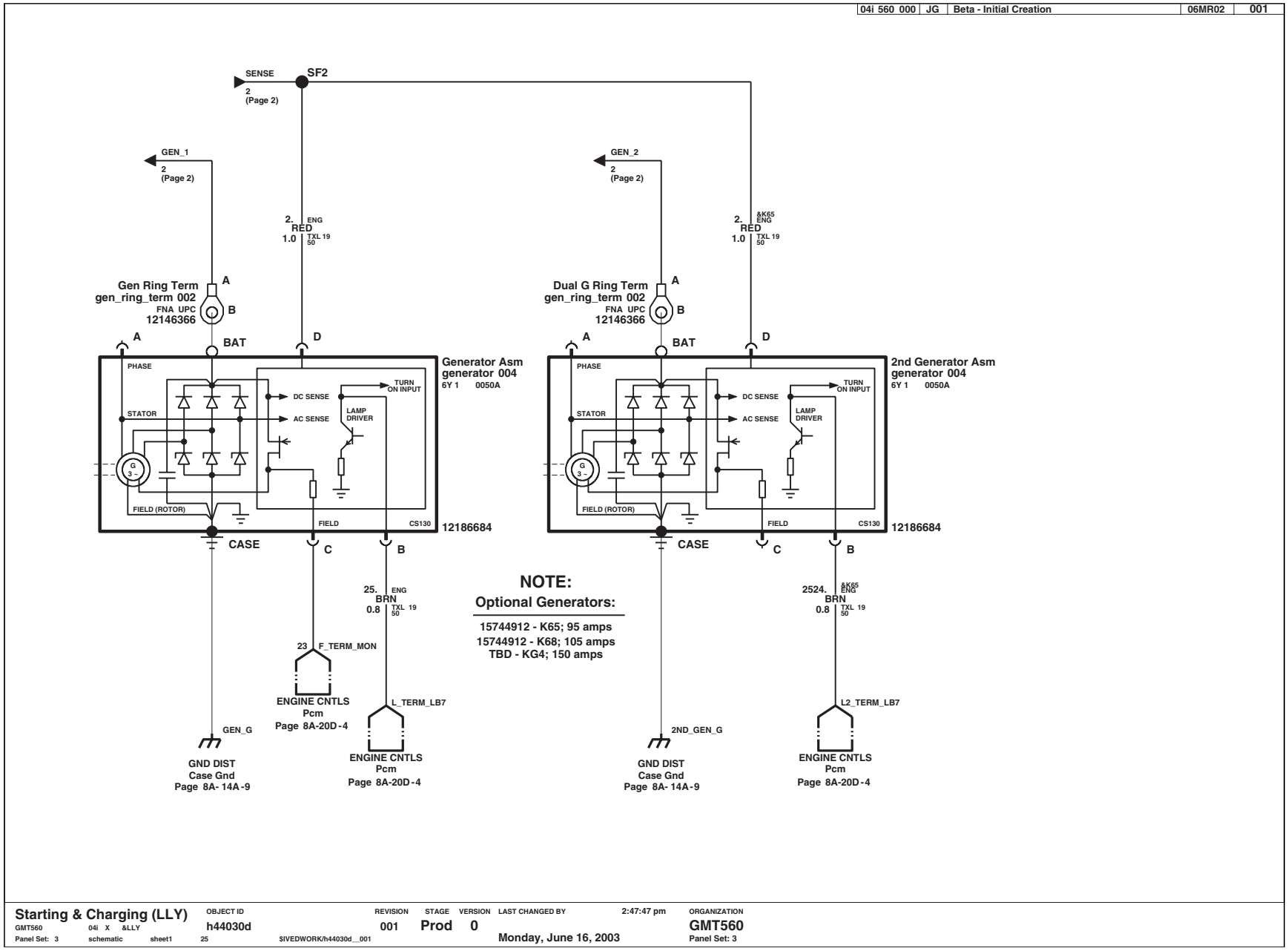


Starting & Charging — (LLY) 6.6L-Diesel/Duramax


SENSE
(Page 3)
GEN_1
(Page 3)
GEN_2
(Page 3)
Secondary Generator Output
Primary Generator Output
Generator Sense
Primary Generator Output
Generator Sense
Secondary Generator Output
Primary Generator Output
Generator Sense
2. &K65&VNF ENG RED 19.0 STX 113 50
2. &VNF ENG RED 19.0 STX 113 50
2. &VNF ENG RED 0.5 FUSELINK 19 50
2. -K65-VNF ENG RED 19.0 STX 113 50
SC2
2. -K65-VNF ENG RED 8.0 FUSELINK 37 50
2. -K65-VNF ENG RED 0.5 FUSELINK 19 50
2. &K65-VNF ENG RED 19.0 STX 113 50
SA2
2. &K65-VNF ENG RED 19.0 STX 113 50
SC2
2. &K65-VNF ENG RED 8.0 FUSELINK 37 50
2. &K65-VNF ENG RED 8.0 FUSELINK 37 50
2. &K65-VNF ENG RED 0.5 FUSELINK 19 50
A B Iso Term Jct 3 12146745 002 UPC FNA 12146745 M10
A B Iso Term Jct 2 12146745 002 UPC FNA 12146745 M10
A B Start Ring Term 3 12103508 003 UPC FNA 12103508 M8
A B Start Ring Term 3 12160991 002 UPC FNA 12160991 M8
A B Start Ring Term 3 12146469 003 UPC FNA 12146469 M8
With Isolator
Single Generator
Dual Generators
ISO_POST
VNF
BATTERIES
Isolator Post
Page 8A-35D -2
START
(Page 1)

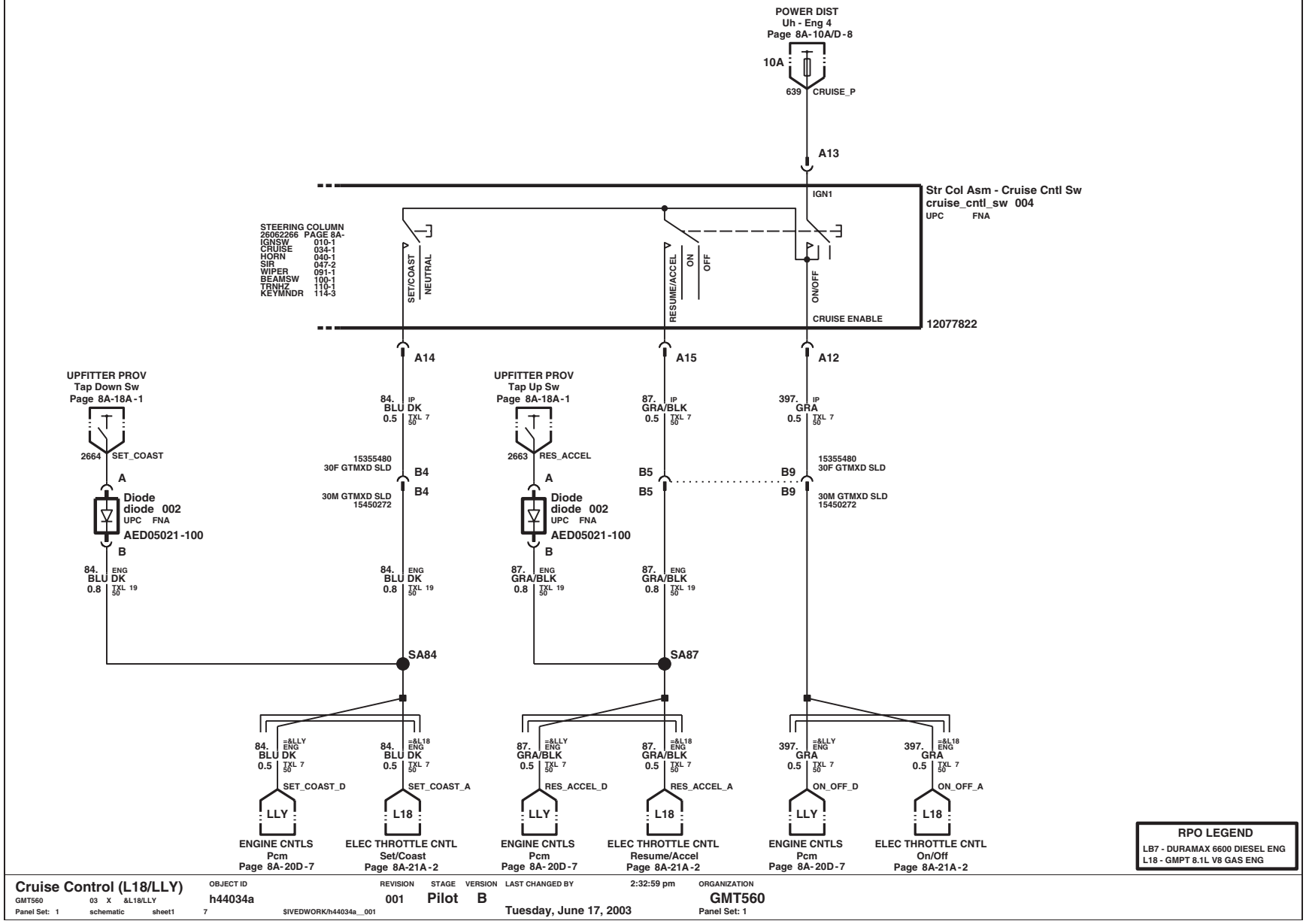
Starting & Charging (LLY) OBJECT ID h44030d REVISION 001 STAGE Prod VERSION 0 LAST CHANGED BY 2:47:47 pm ORGANIZATION GMT560
GMT560 04i X &LLY Monday, June 16, 2003 Panel Set: 2
Panel Set: 2 schematic sheet1 25 $IVEDWORK/h44030d__001

Starting & Charging — (LLY) 6.6L-Diesel/Duramax



Cruise Control — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax

03 560 000	TY	PILOT B - INITIAL CREATION	27NO00	001
03 560 818	JG	REPLACED CBs WITH MINI-FUSES.	27NO00	001

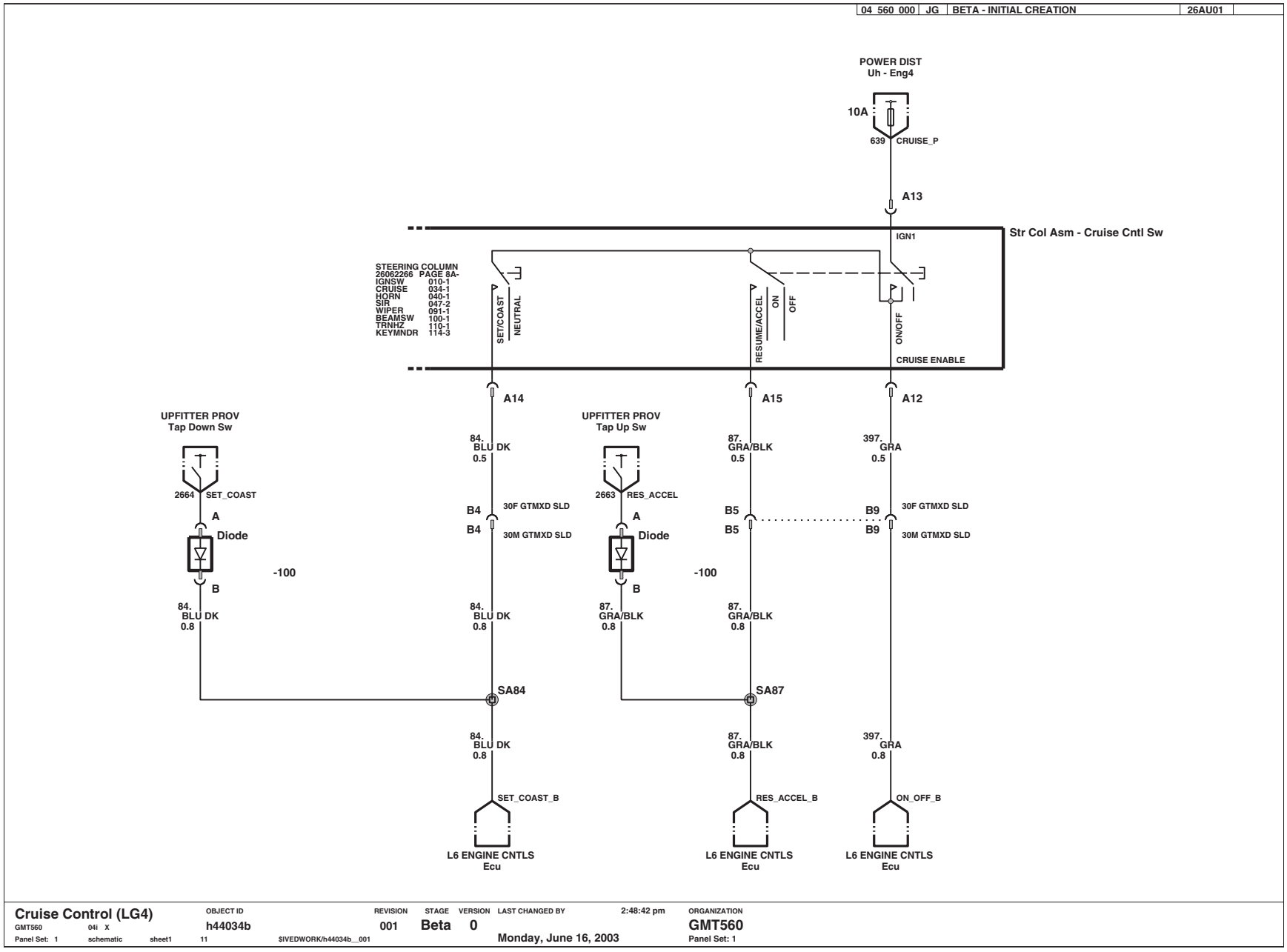


Cruise Control (L18/LLY)

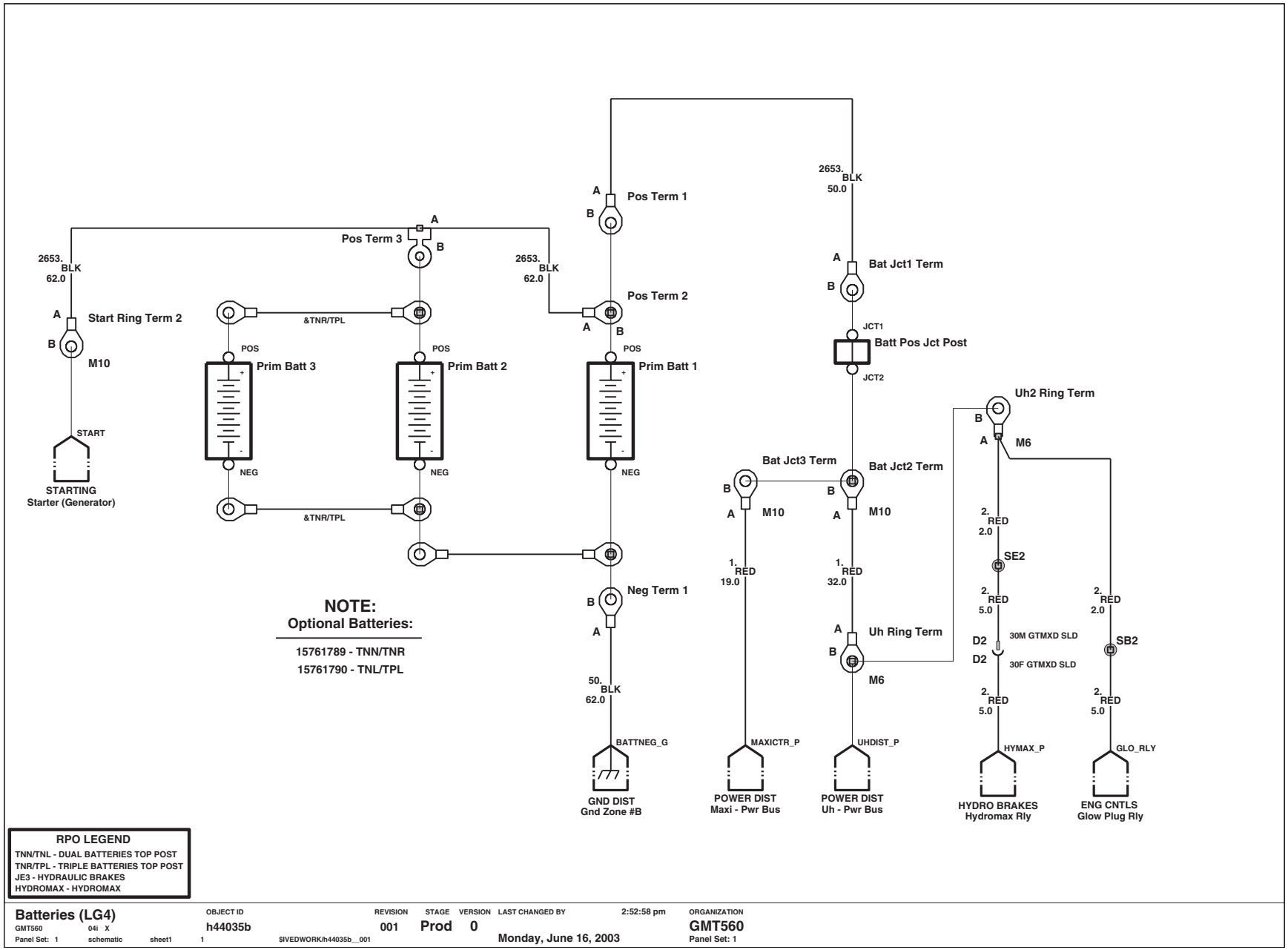
OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
h44034a	001	Pilot	B	Tuesday, June 17, 2003	2:32:59 pm	GMT560

GMT560 03 X &L18/LLY — Panel Set: 1 — schematic — sheet1 — 7 — $IVEDWORK/h44034a__001 — Panel Set: 1

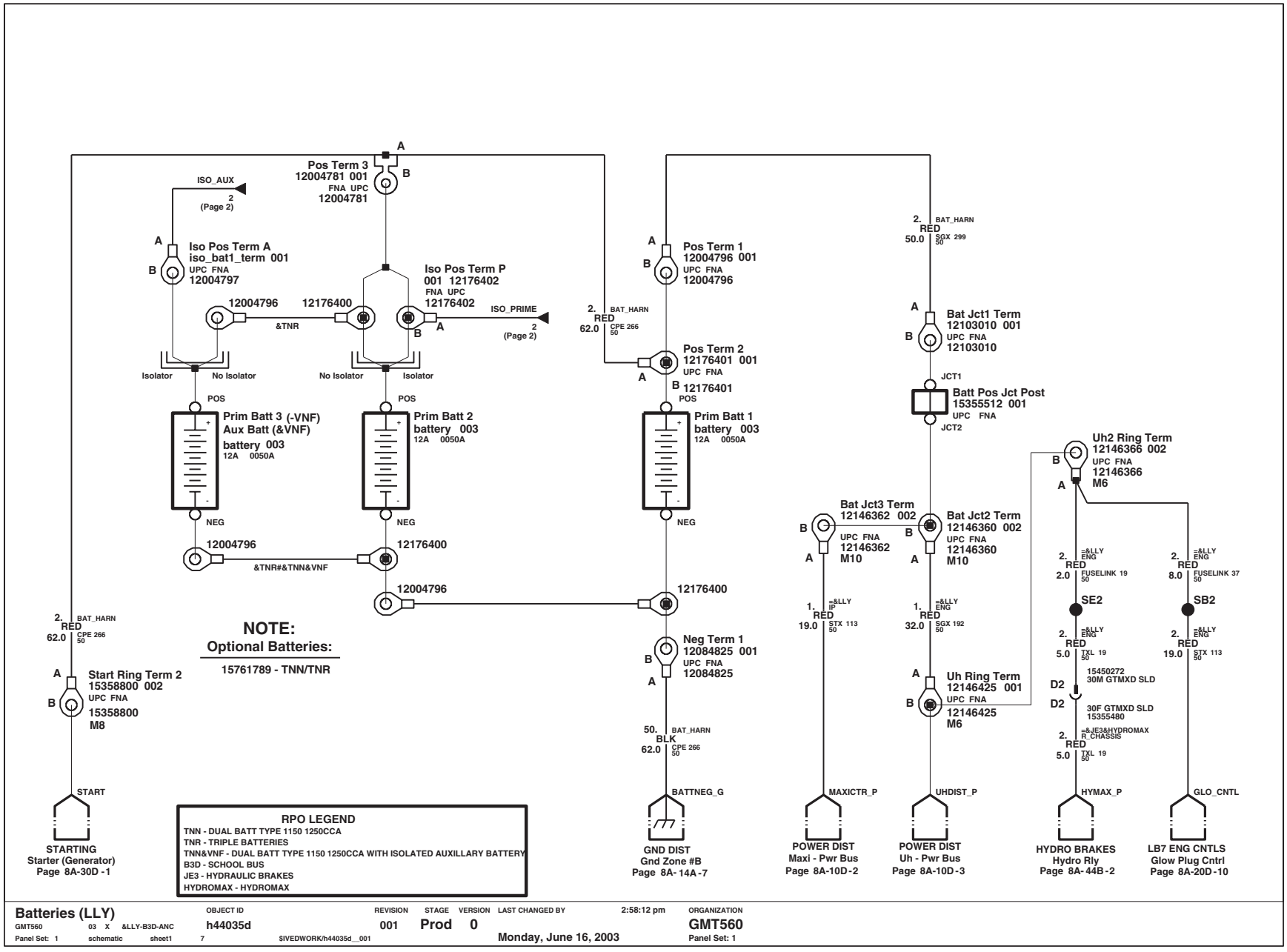
Cruise Control — (LG4-'04i) 7.8L-Diesel/Duramax



Batteries — (LG4-'04i) 7.8L-Diesel/Duramax

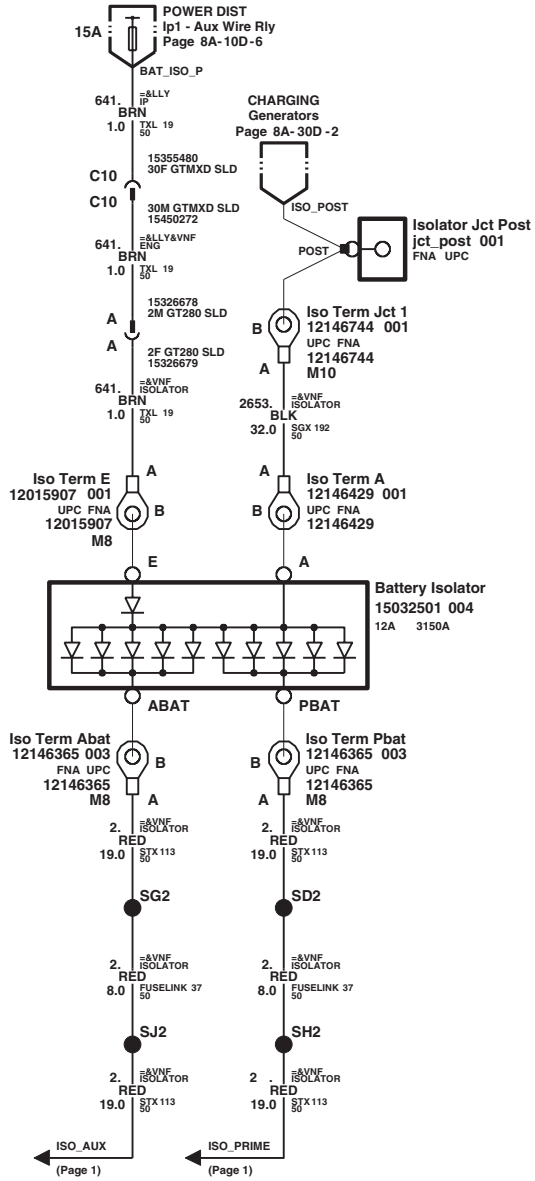


Batteries — (LLY) 6.6L-Diesel/Duramax



Batteries — (LLY) 6.6L-Diesel/Duramax

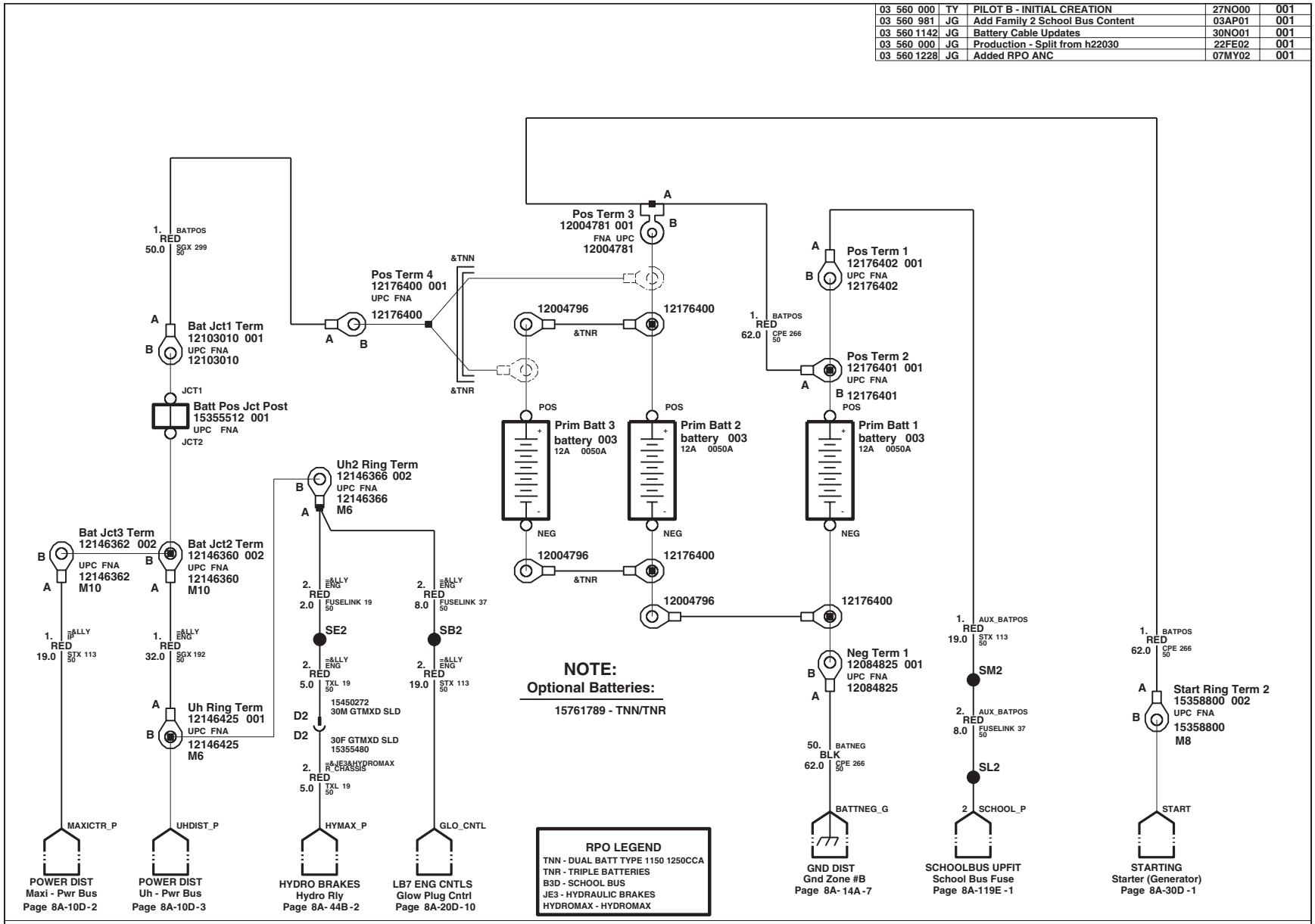
03 560 000	TY	PILOT B - INITIAL CREATION	27NO00	001
03 560 981	JG	Add Family 2 School Bus Content	03AP01	001
03 560 1142	JG	Battery Cable Updates	30NO01	001
03 560 000	JG	Production - Split from h22030	22FE02	001
03 560 1228	JG	Added RPO ANC	07MY02	001



Batteries (LLY)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
GMT560 03 X &LLY-B3D-ANC	h44035d	001	X	0		2:58:12 pm	GMT560
Panel Set: 2 schematic sheet1 7	$IVEDWORK/h44035d__001				Monday, June 16, 2003		Panel Set: 2

Batteries Bus — (LLY) 6.6L-Diesel/Duramax

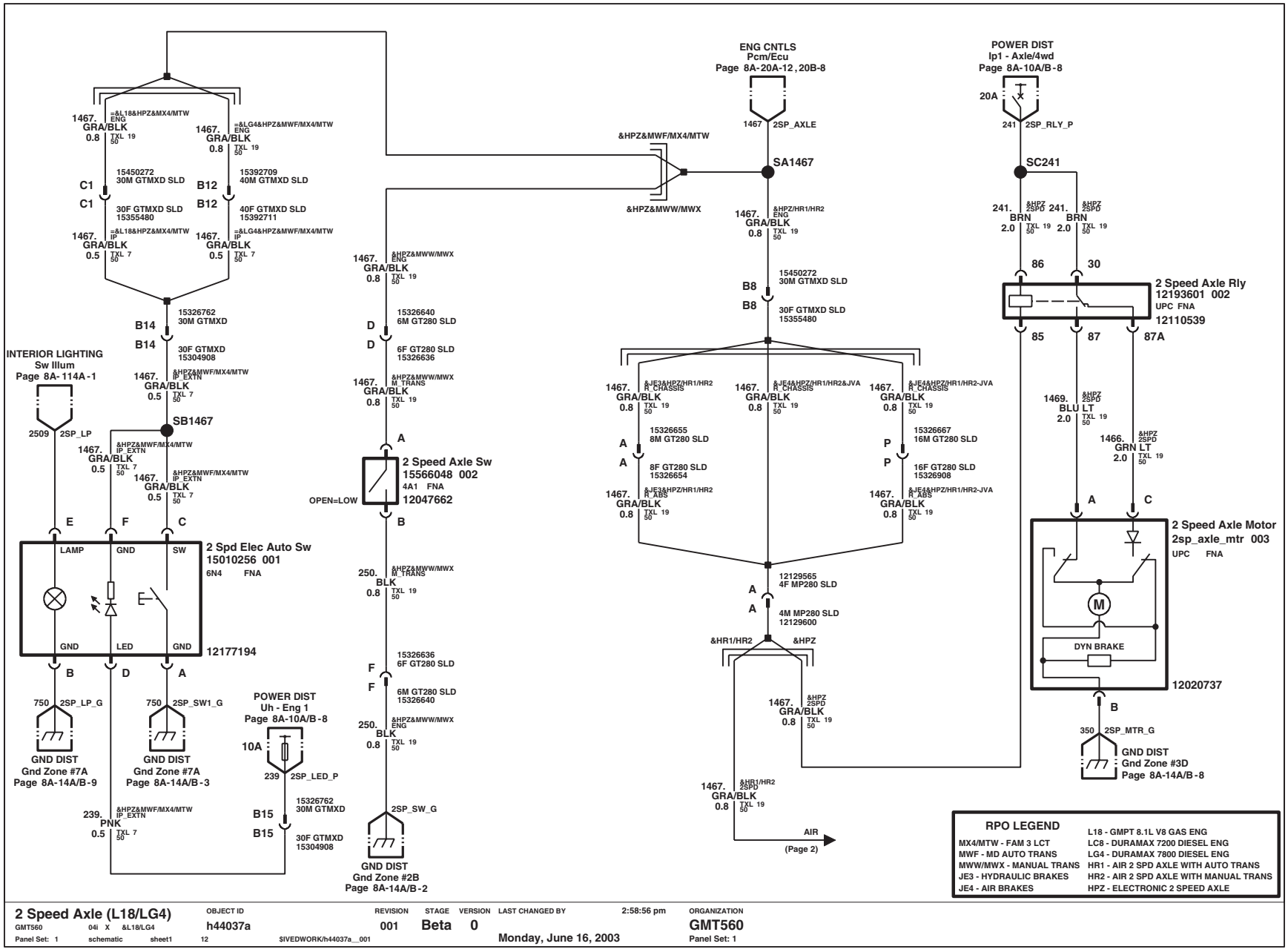
03 560 000	TY	PILOT B - INITIAL CREATION	27NO00	001
03 560 981	JG	Add Family 2 School Bus Content	03AP01	001
03 560 1142	JG	Battery Cable Updates	30NO01	001
03 560 000	JG	Production - Split from h22030	22FE02	001
03 560 1228	JG	Added RPO ANC	07MY02	001



Batteries (LLY Bus) OBJECT ID h44035f REVISION 001 STAGE Prod VERSION 0 LAST CHANGED BY 2:57:15 pm Monday, June 16, 2003 ORGANIZATION GMT560

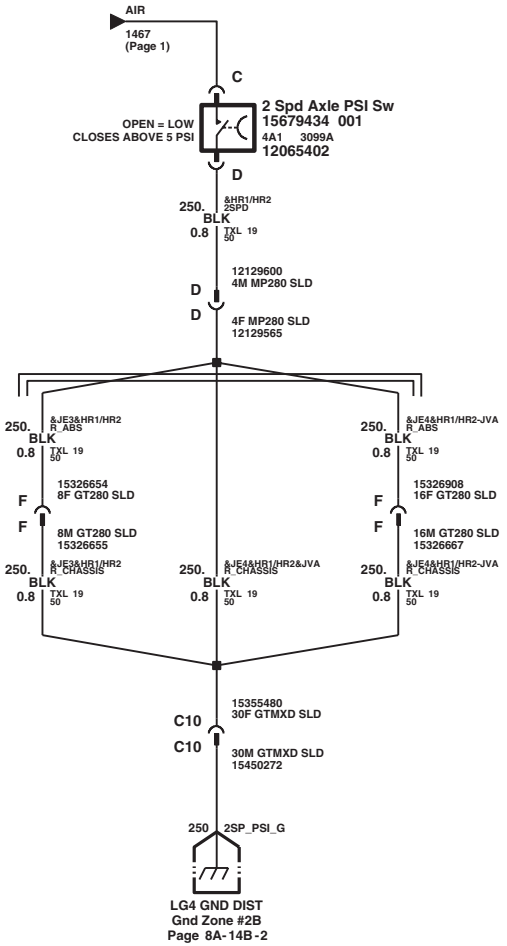
GMT560 03 X &LLY&B3D/ANC Panel Set: 1 schematic sheet1 11 $IVEDWORK/h44035f__001 Panel Set: 1

2-Speed Axle — (L18) 8.1L-Gas/NAPT — (LG4-'04i) 7.8L-Diesel/Duramax



2-Speed Axle — (L18) 8.1L-Gas/NAPT — (LG4-'04i) 7.8L-Diesel/Duramax

04 560 000	JG	Beta - Initial Creation	02JA02	001
04 560 1106	JG	900 Circuit Number Updates	08FE02	001
04 560 1228	JG	Add ABS delete option	03MY02	001



RPO LEGEND

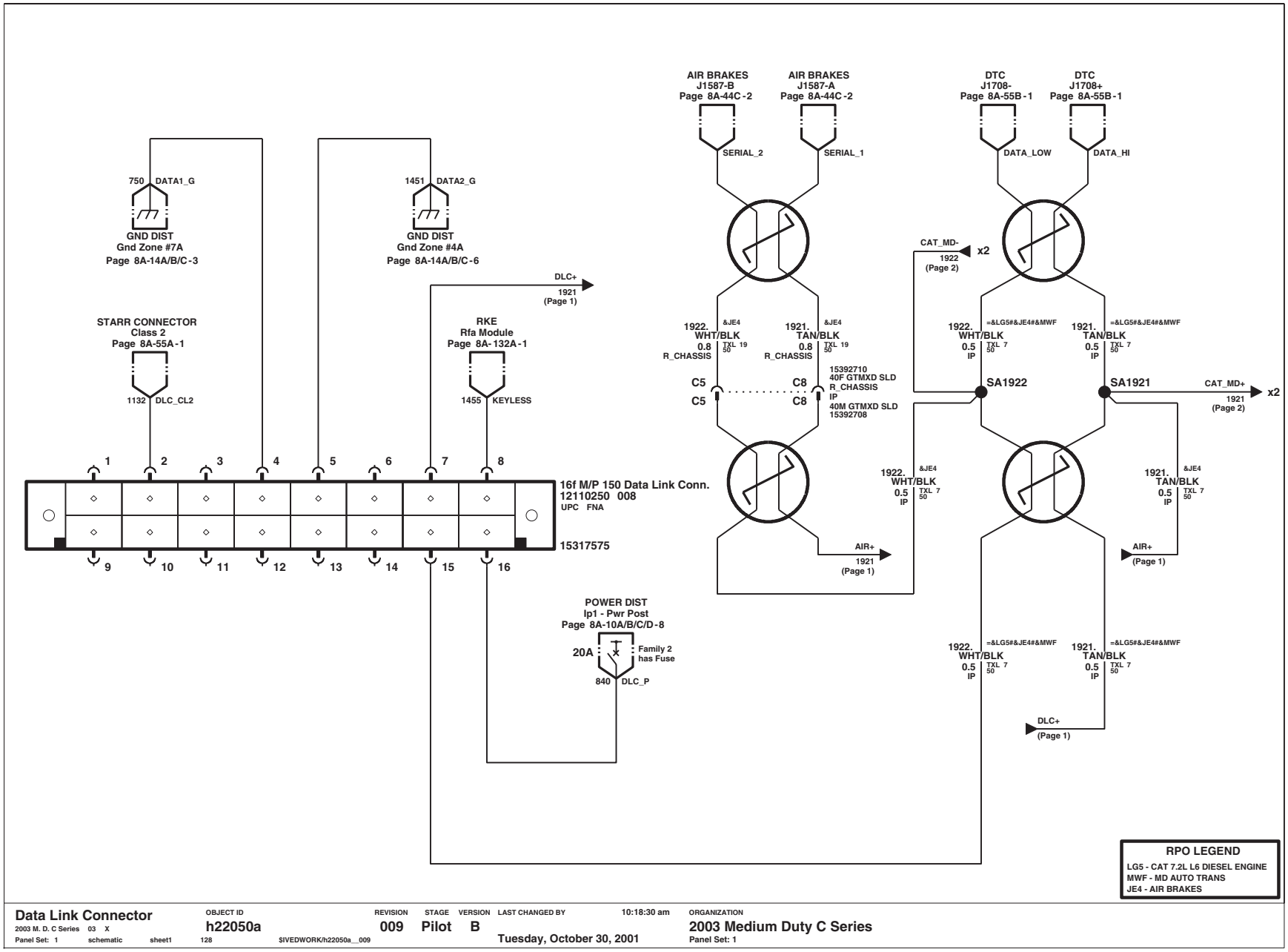
HR1 - AIR 2 SPD AXLE WITH AUTO TRANS
HR2 - AIR 2 SPD AXLE WITH MANUAL TRANS
HPZ - ELECTRONIC 2 SPEED AXLE
JE3 - HYDRAULIC BRAKES
JE4 - AIR BRAKES

2 Speed Axle (L18/LG4)

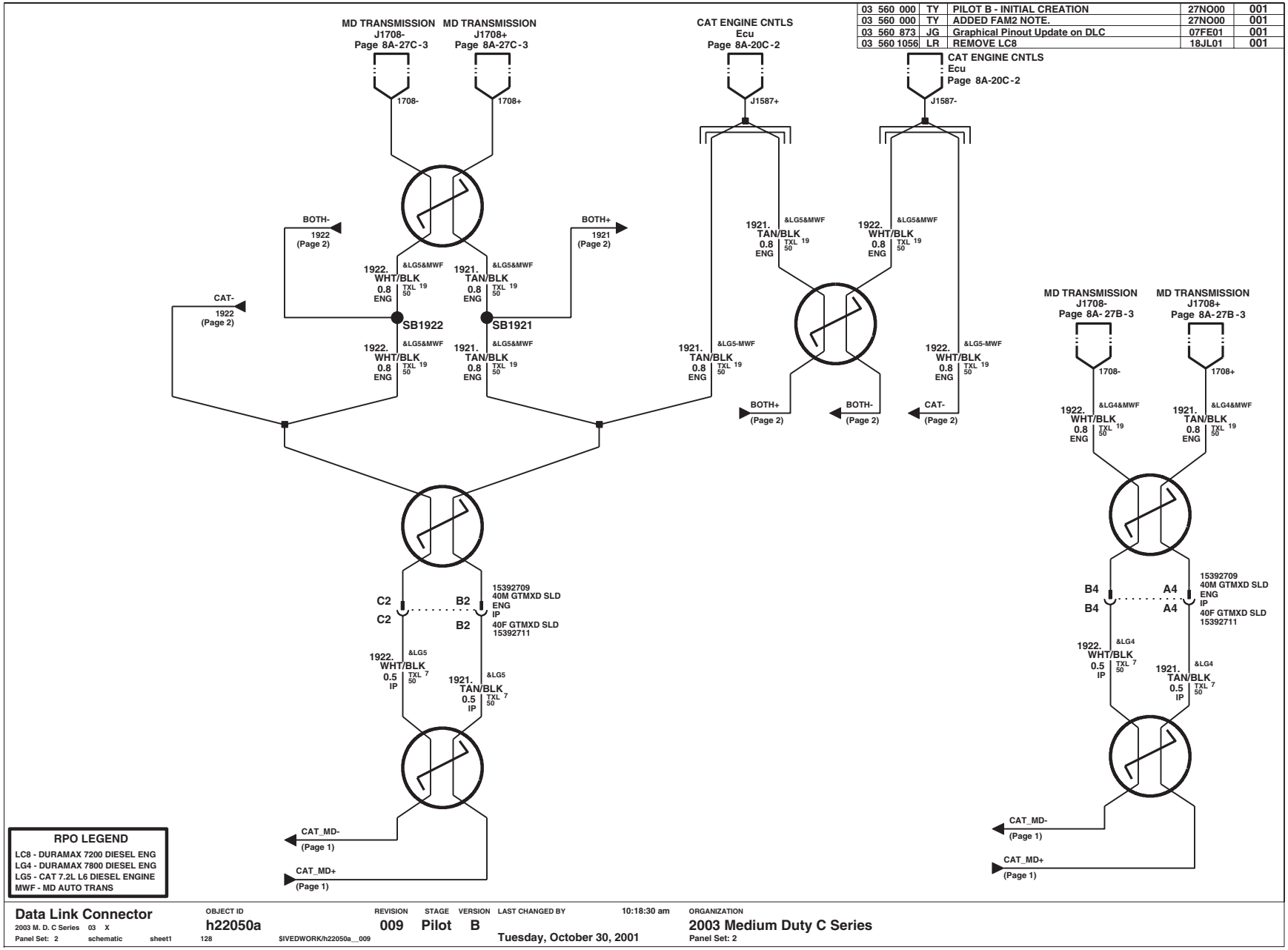
OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
h44037a	001	Beta	0	Monday, June 16, 2003	2:58:56 pm	GMT560

GMT560 04i X &L18/LG4 Panel Set: 2 schematic sheet1 12 $IVEDWORK/h44037a__001 Panel Set: 2

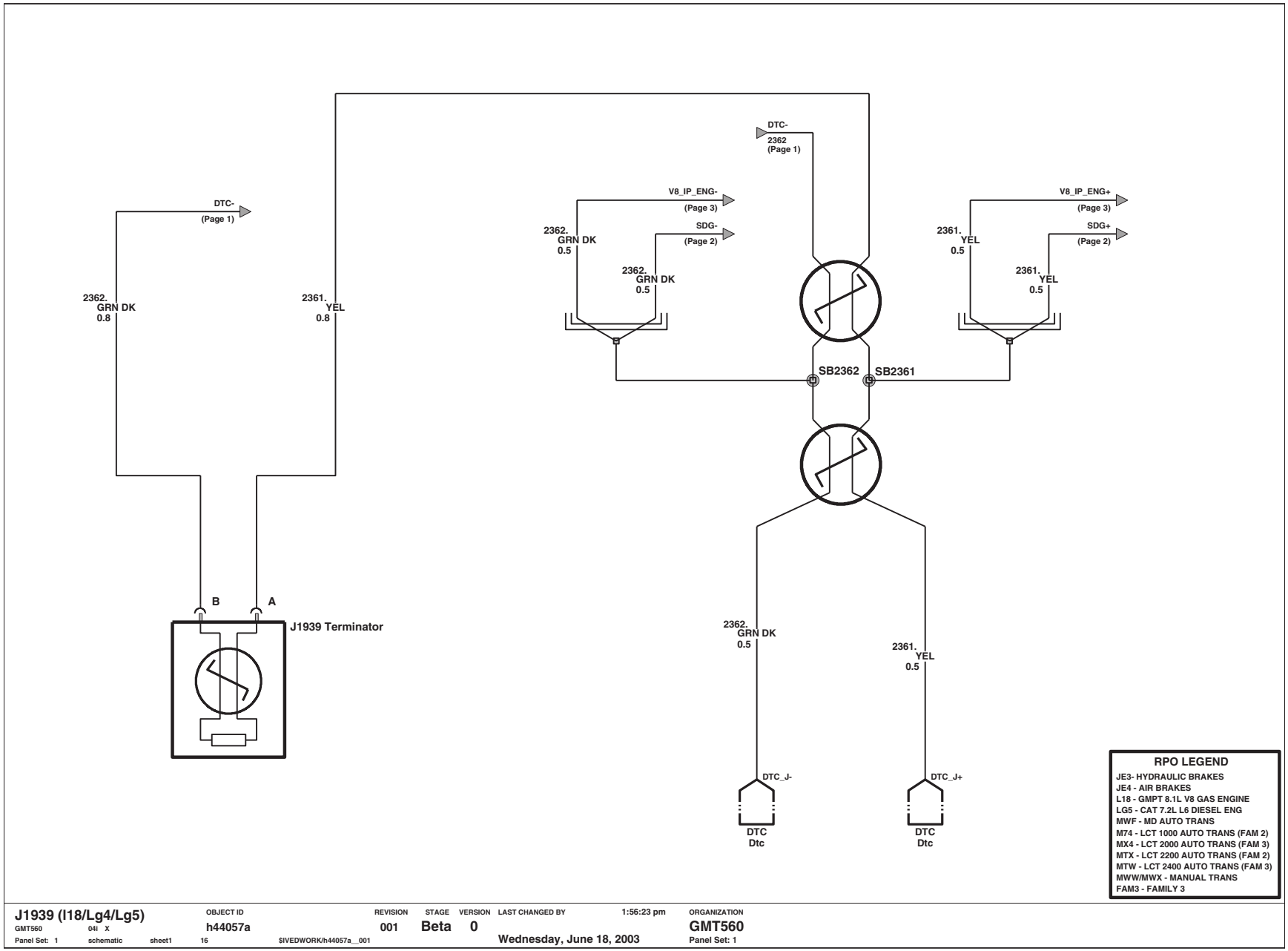
Serial Data — Diagnostic Tool Connector-'03-'04



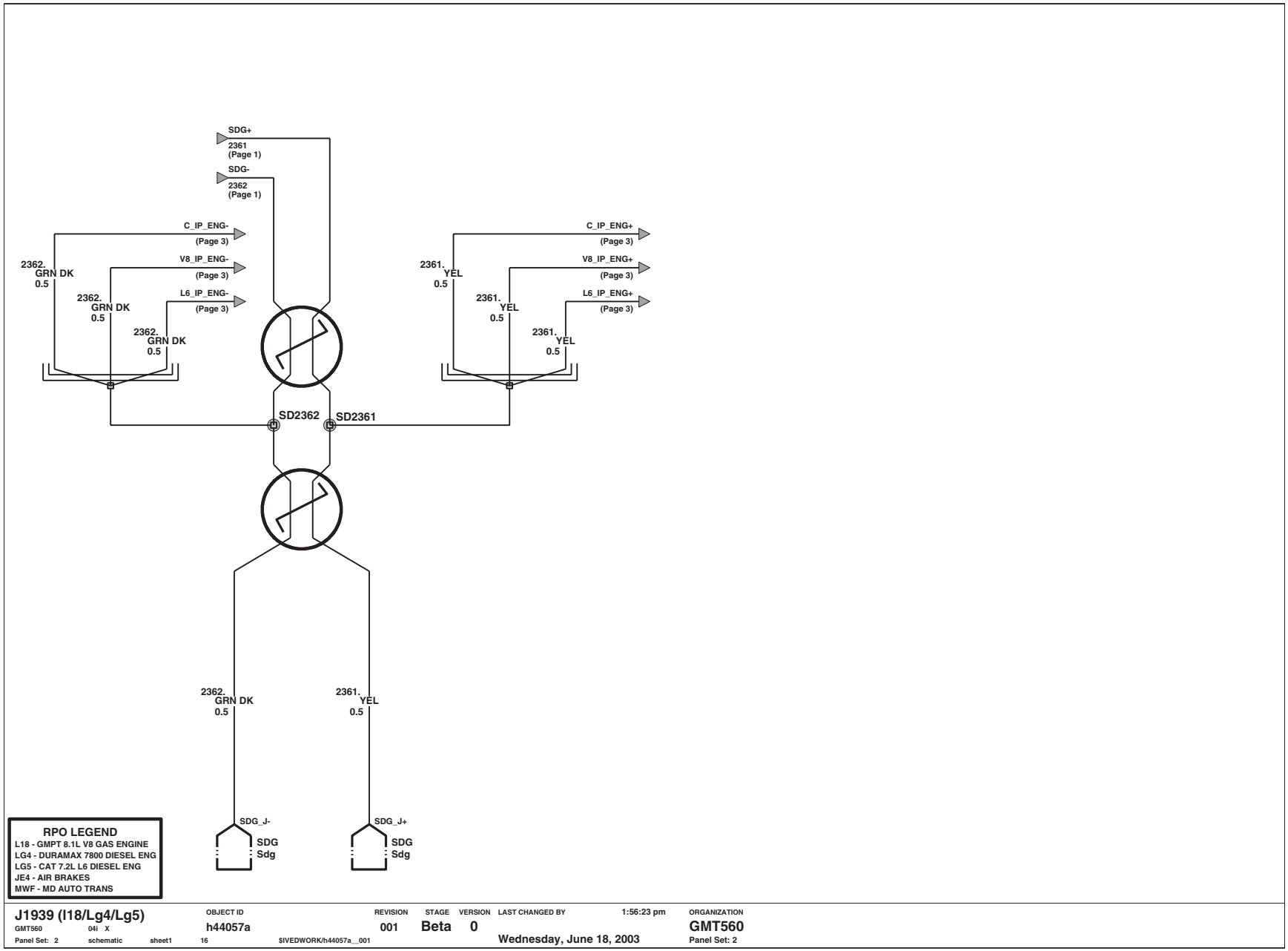
Serial Data — Diagnostic Tool Connector-'03-'04


03 560 000 TY PILOT B - INITIAL CREATION 27NO00 001
03 560 000 TY ADDED FAM2 NOTE. 27NO00 001
03 560 873 JG Graphical Pinout Update on DLC 07FE01 001
03 560 1056 LR REMOVE LC8 18JL01 001
MD TRANSMISSION J1708- Page 8A-27C-3
MD TRANSMISSION J1708+ Page 8A-27C-3
CAT ENGINE CNTLS Ecu Page 8A-20C-2
CAT ENGINE CNTLS Ecu Page 8A-20C-2
MD TRANSMISSION J1708- Page 8A-27B-3
MD TRANSMISSION J1708+ Page 8A-27B-3
1708-
1708+
J1587+
J1587-
BOTH- 1922 (Page 2)
BOTH+ 1921 (Page 2)
CAT- 1922 (Page 2)
SB1922
SB1921
1922. WHT/BLK 0.8 ENG TXL 19 50 &LG5&MWF
1921. TAN/BLK 0.8 ENG TXL 19 50 &LG5&MWF
1921. TAN/BLK 0.8 ENG TXL 19 50 &LG5-MWF
1922. WHT/BLK 0.8 ENG TXL 19 50 &LG5-MWF
BOTH+ (Page 2)
BOTH- (Page 2)
CAT- (Page 2)
1922. WHT/BLK 0.8 ENG TXL 19 50 &LG4&MWF
1921. TAN/BLK 0.8 ENG TXL 19 50 &LG4&MWF
C2
B2
15392709 40M GTMXD SLD ENG IP
40F GTMXD SLD 15392711
B4
A4
1922. WHT/BLK 0.5 IP TXL 7 50 &LG5
1921. TAN/BLK 0.5 IP TXL 7 50 &LG5
1922. WHT/BLK 0.5 IP TXL 7 50 &LG4
1921. TAN/BLK 0.5 IP TXL 7 50 &LG4
CAT_MD- (Page 1)
CAT_MD+ (Page 1)
RPO LEGEND
LC8 - DURAMAX 7200 DIESEL ENG
LG4 - DURAMAX 7800 DIESEL ENG
LG5 - CAT 7.2L L6 DIESEL ENGINE
MWF - MD AUTO TRANS
Data Link Connector
2003 M. D. C Series 03 X
Panel Set: 2 schematic sheet1 128
OBJECT ID h22050a
$IVEDWORK/h22050a__009
REVISION 009
STAGE Pilot
VERSION B
LAST CHANGED BY
10:18:30 am
Tuesday, October 30, 2001
ORGANIZATION
2003 Medium Duty C Series
Panel Set: 2

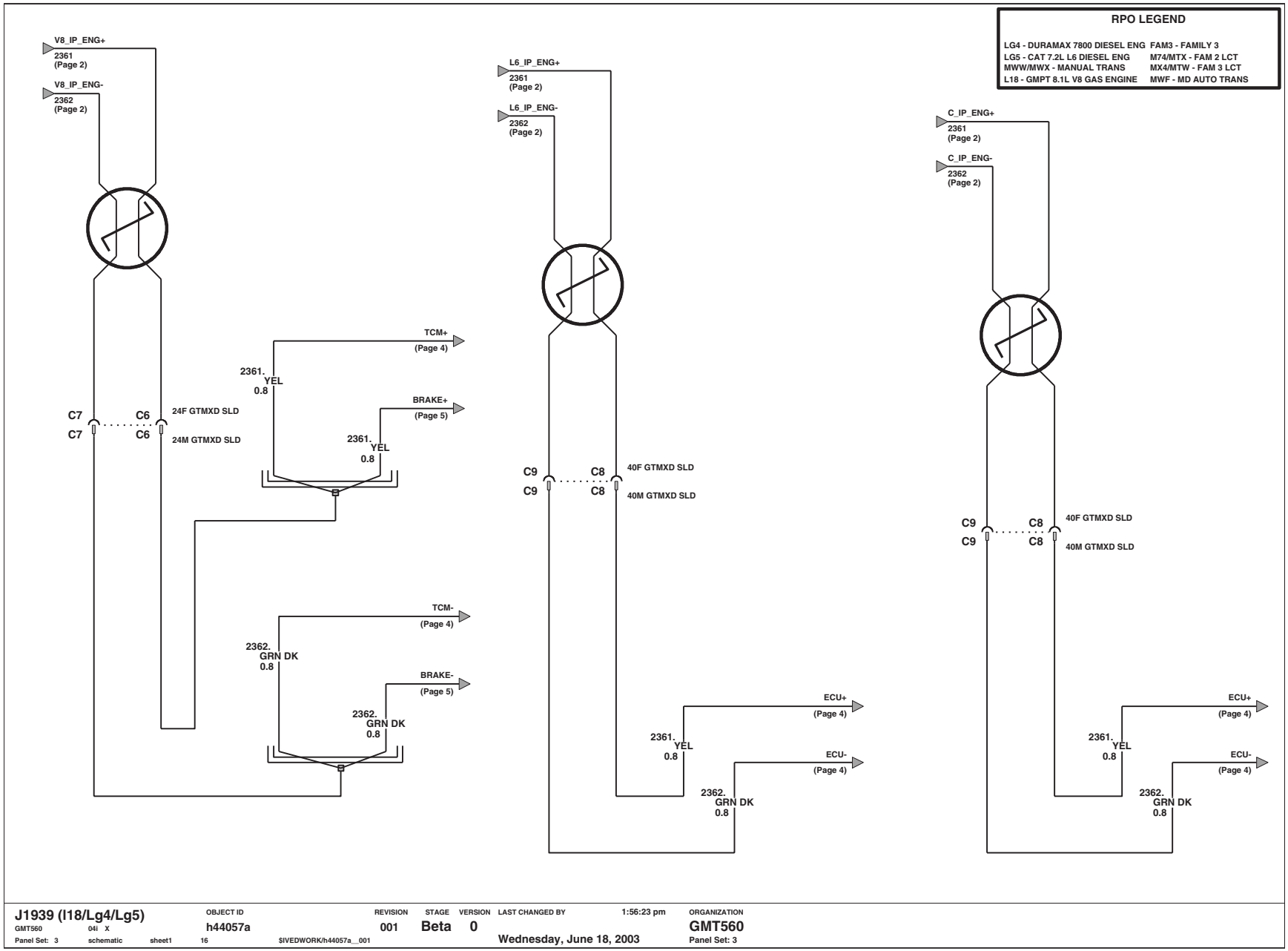
Serial Data — J1939 — (L18) 8.1L-Gas/NAPT — (LG4-'04i) 7.8L-Diesel/Duramax — (LG5) 7.2L CAT



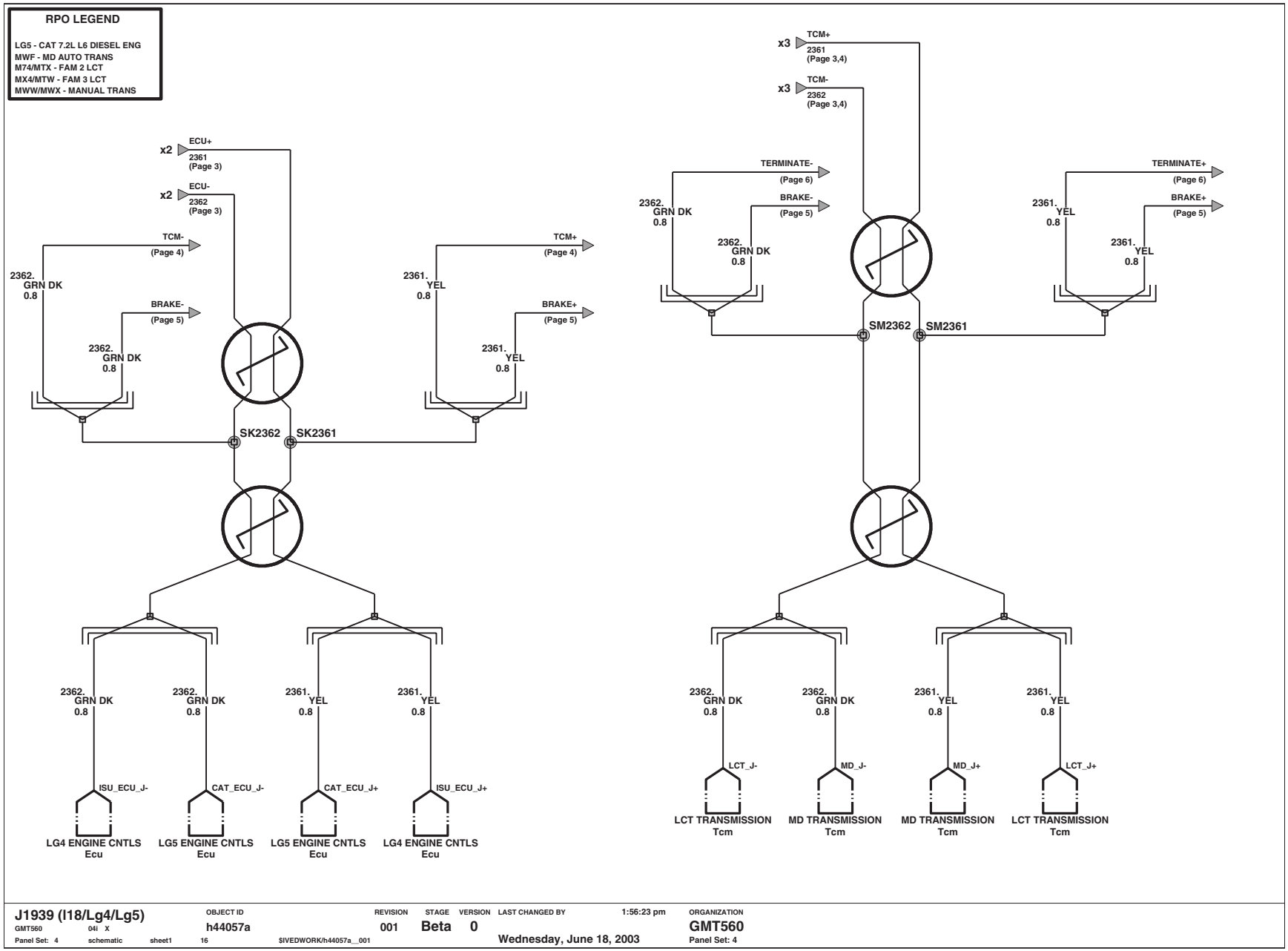
Serial Data — J1939 — (L18) 8.1L-Gas/NAPT — (LG4-'04i) 7.8L-Diesel/Duramax — (LG5) 7.2L CAT



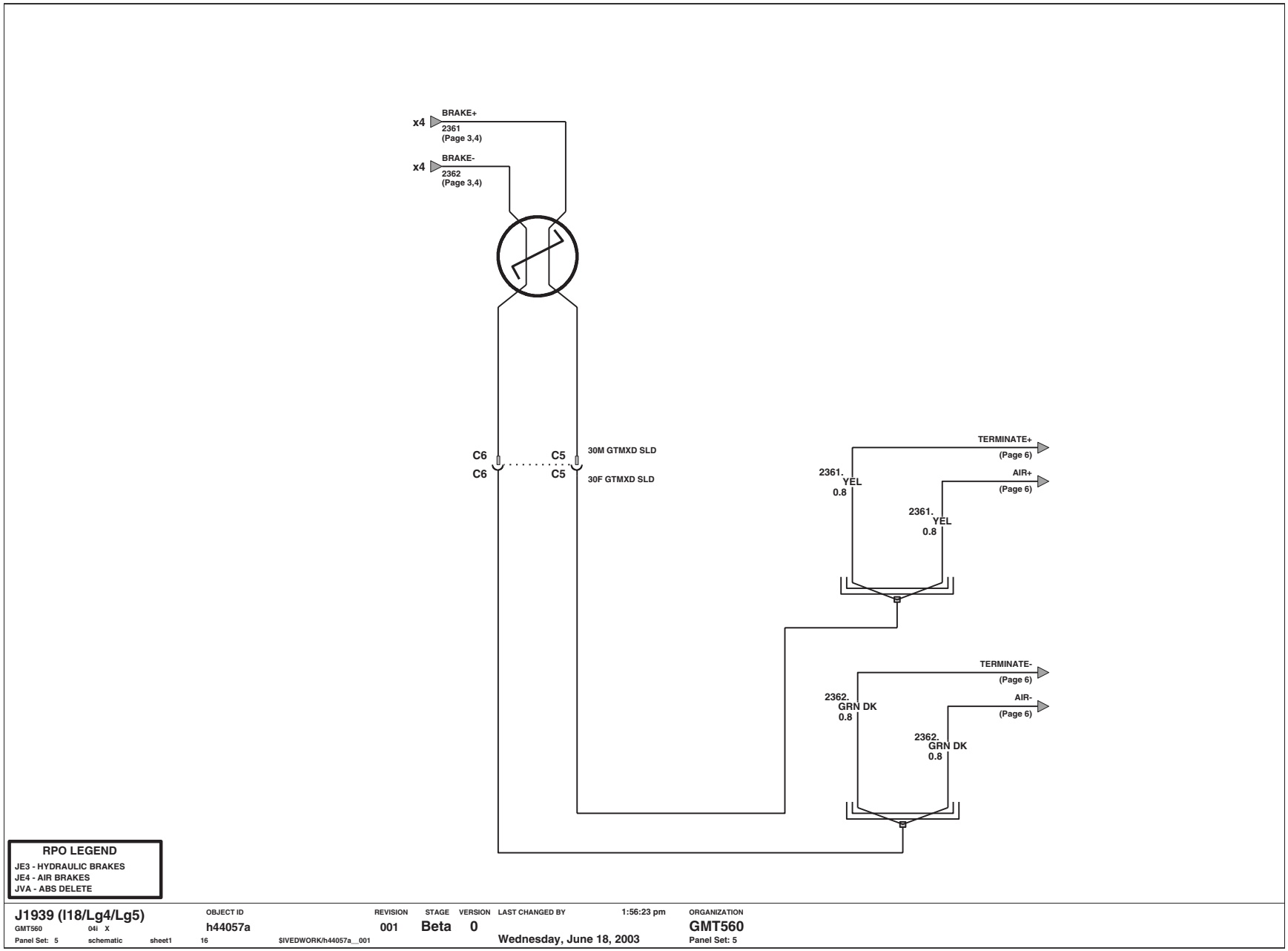
Serial Data — J1939 — (L18) 8.1L-Gas/NAPT — (LG4-'04i) 7.8L-Diesel/Duramax — (LG5) 7.2L CAT



Serial Data — J1939 — (L18) 8.1L-Gas/NAPT — (LG4-'04i) 7.8L-Diesel/Duramax — (LG5) 7.2L CAT

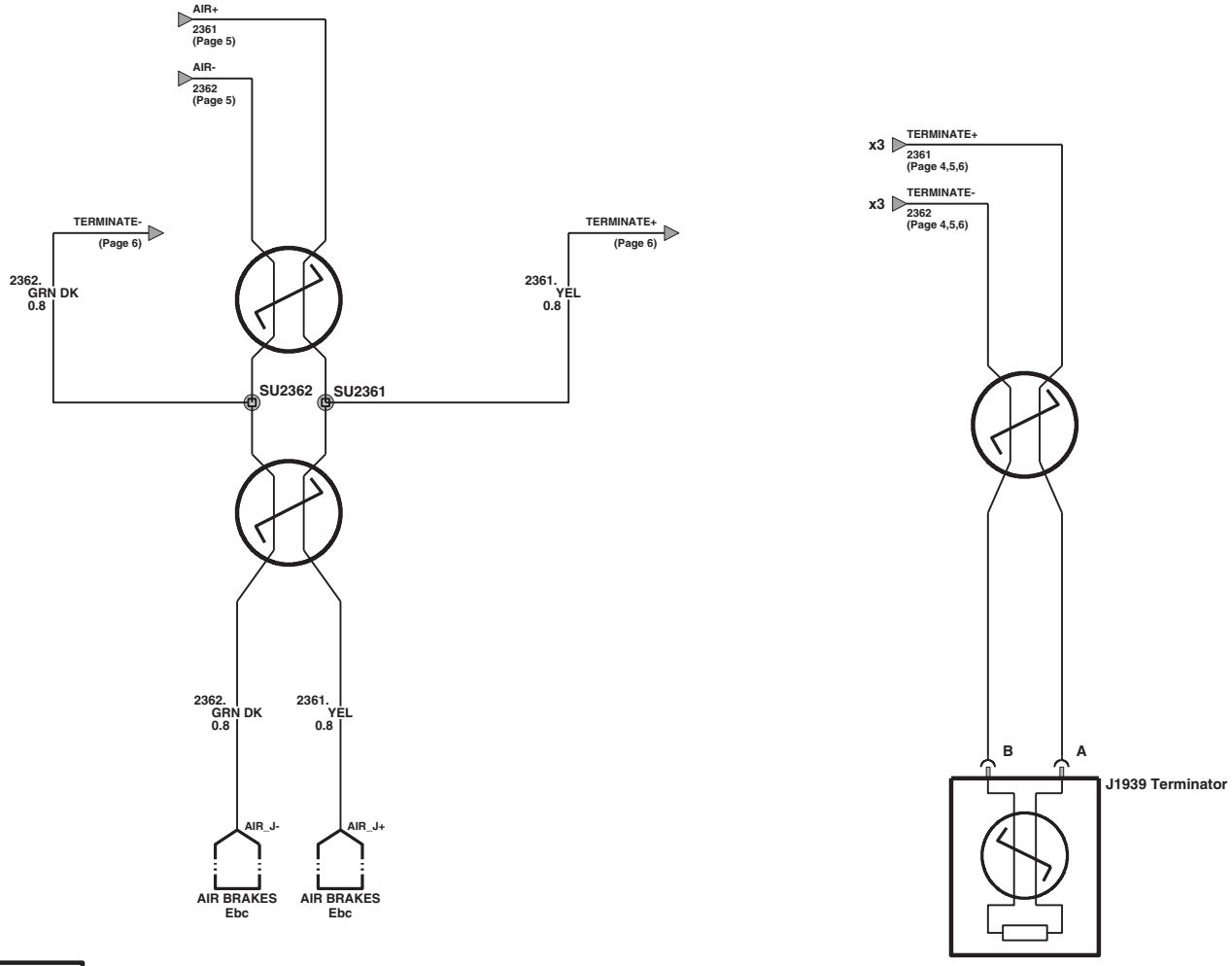


Serial Data — J1939 — (L18) 8.1L-Gas/NAPT — (LG4-'04i) 7.8L-Diesel/Duramax — (LG5) 7.2L CAT



Serial Data — J1939 — (L18) 8.1L-Gas/NAPT — (LG4-'04i) 7.8L-Diesel/Duramax — (LG5) 7.2L CAT

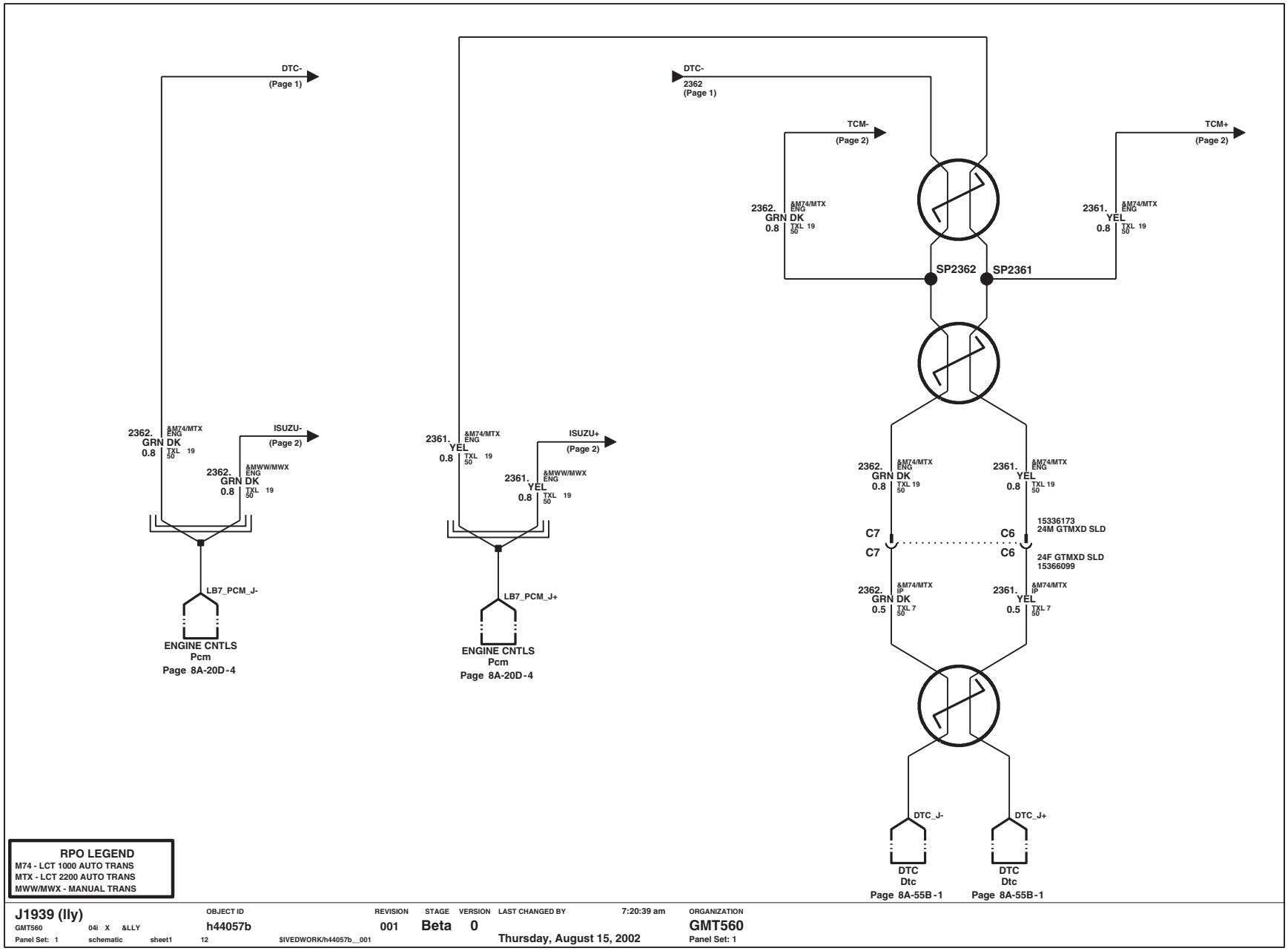
04_560_000	JG	Beta - Initial Creation	21AU01
03_560 1149	JG	MTX replaces MTW (Fam 2)	12DE01



RPO LEGEND
JE4 - AIR BRAKES
JVA - ABS DELETE

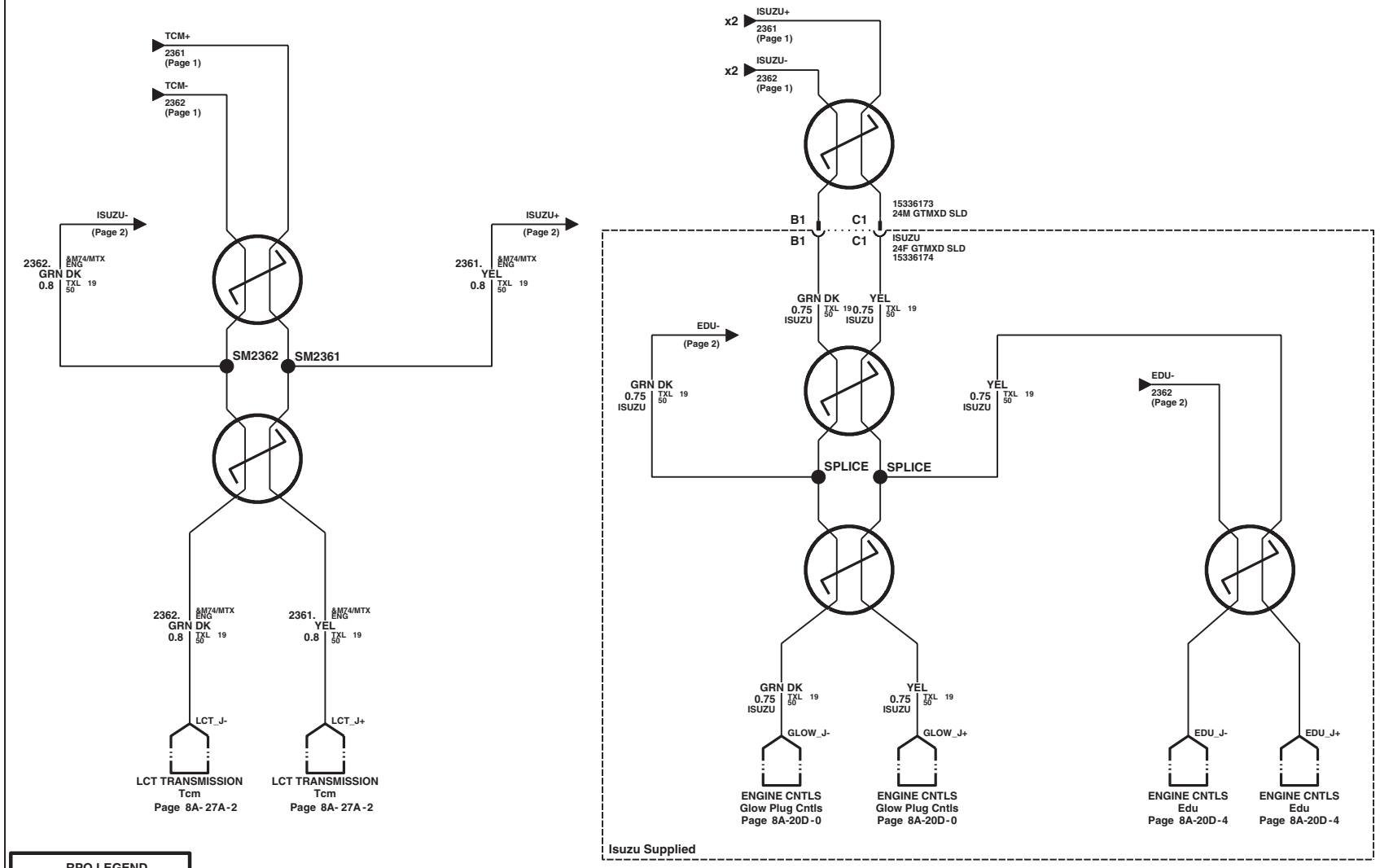
J1939 (l18/Lg4/Lg5)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY	1:56:23 pm	ORGANIZATION
GMT560 04i X	h44057a	001	Beta	0			GMT560
Panel Set: 6 schematic sheet1 16	$IVEDWORK/h44057a_001				Wednesday, June 18, 2003		Panel Set: 6

Serial Data — J1939 — (LLY) 6.6L-Diesel/Duramax



Serial Data — J1939 — (LLY) 6.6L-Diesel/Duramax

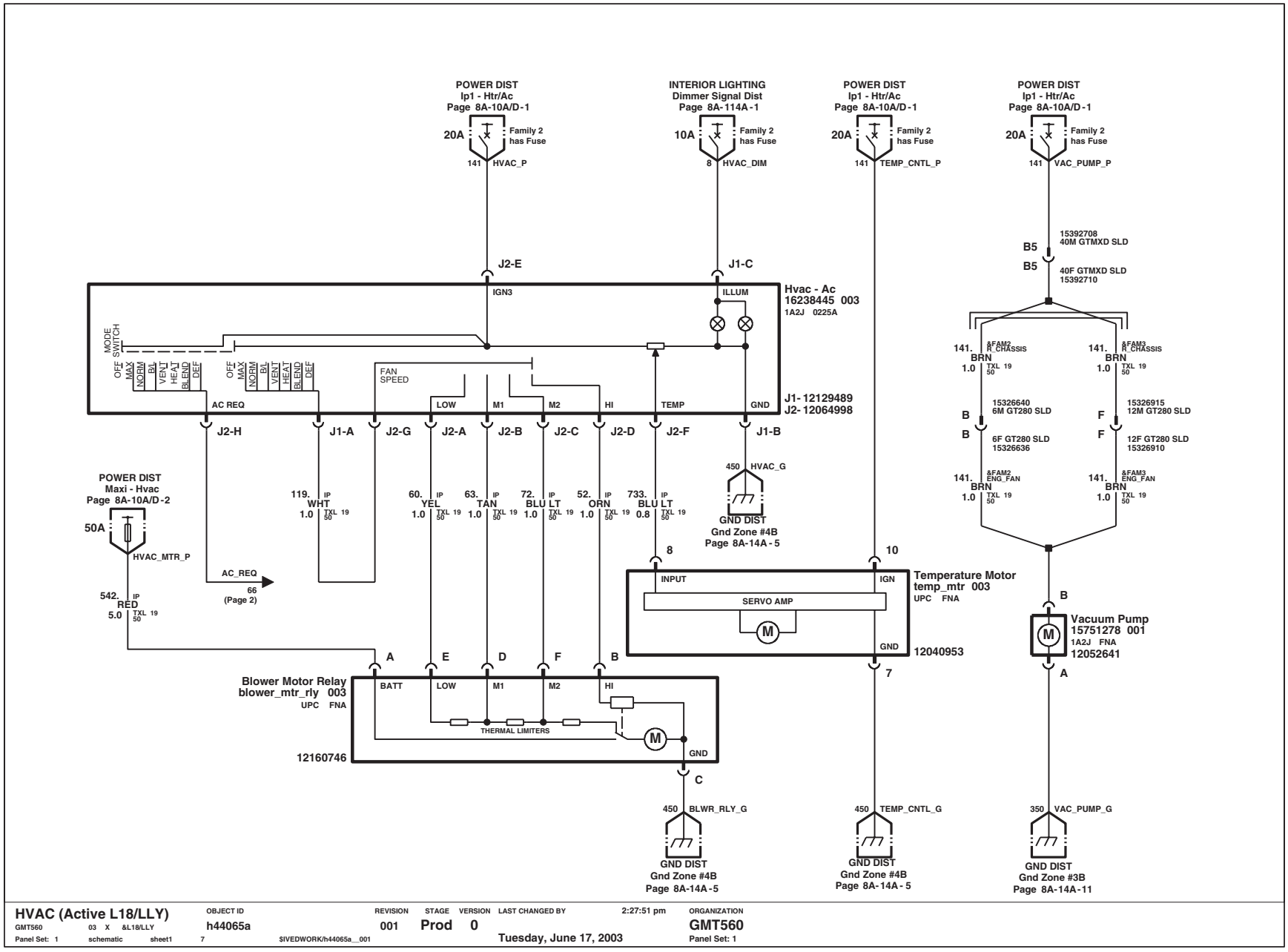
04 560 000	JG	Beta - Initial Creation	21AU01	001
03 560 1149	JG	MTX replaces MTW (Fam 2)	12DE01	001



RPO LEGEND
M74 - LCT 1000 AUTO TRANS
MTX - LCT 2200 AUTO TRANS

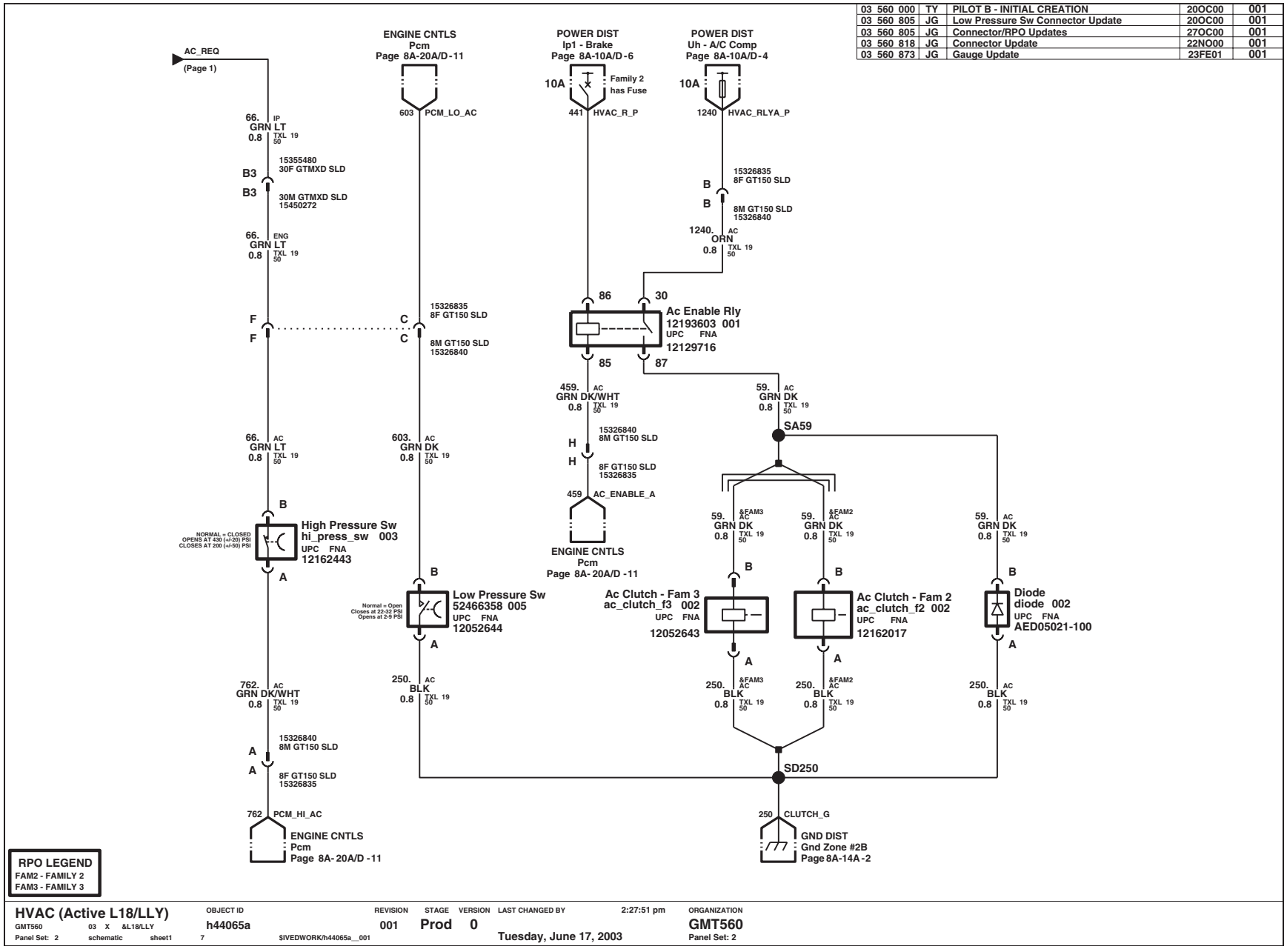
J1939 (lly)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY	7:20:39 am	ORGANIZATION
GMT560 04i X &LLY	h44057b	001	Beta	0			GMT560
Panel Set: 2 schematic sheet1 12	$IVEDWORK/h44057b__001				Thursday, August 15, 2002		Panel Set: 2

HVAC — Active — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax

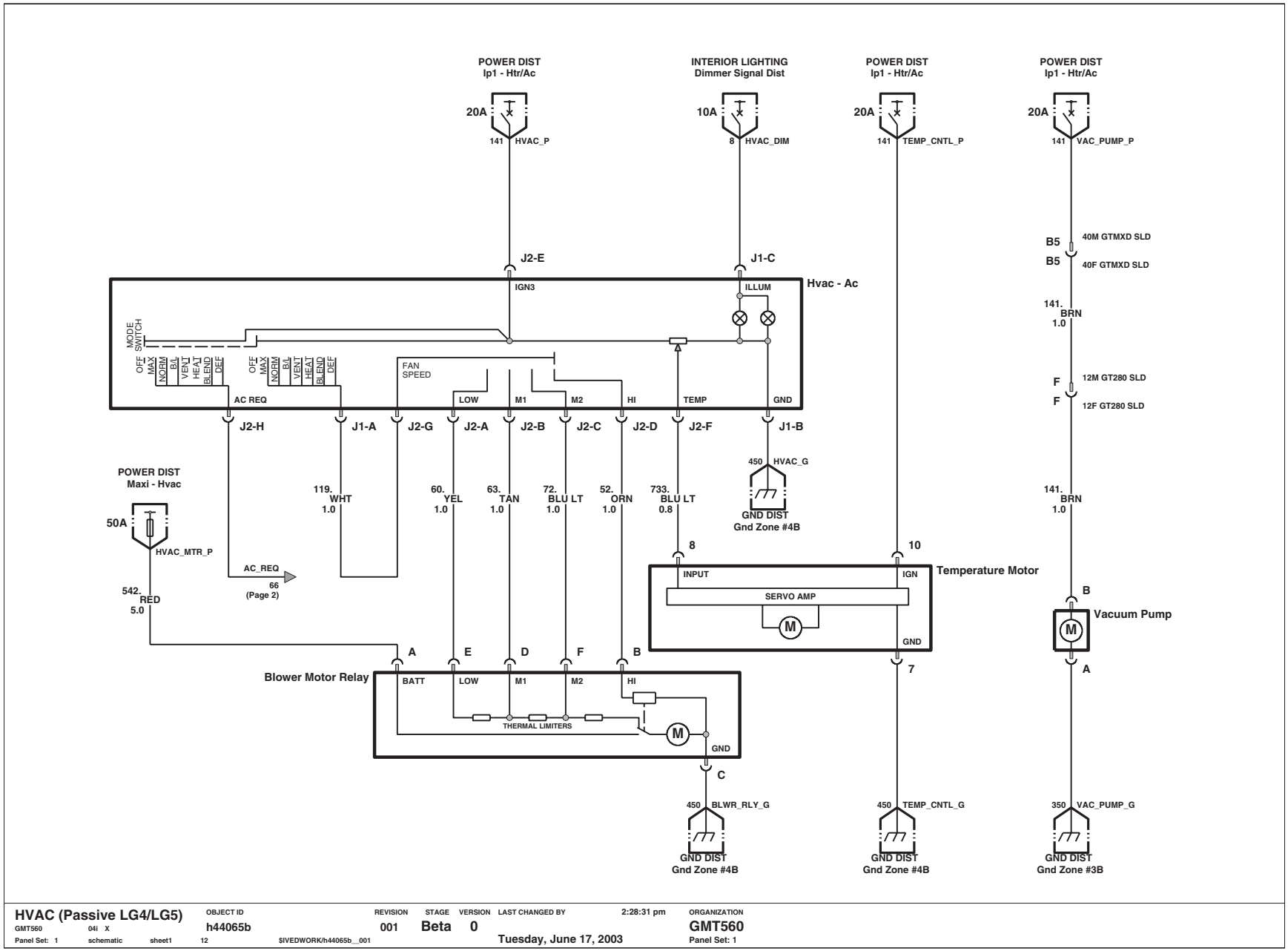


HVAC — Active — (L18) 8.1L-Gas/NAPT — (LLY) 6.6L-Diesel/Duramax

03 560 000	TY	PILOT B - INITIAL CREATION	20OC00	001
03 560 805	JG	Low Pressure Sw Connector Update	20OC00	001
03 560 805	JG	Connector/RPO Updates	27OC00	001
03 560 818	JG	Connector Update	22NO00	001
03 560 873	JG	Gauge Update	23FE01	001

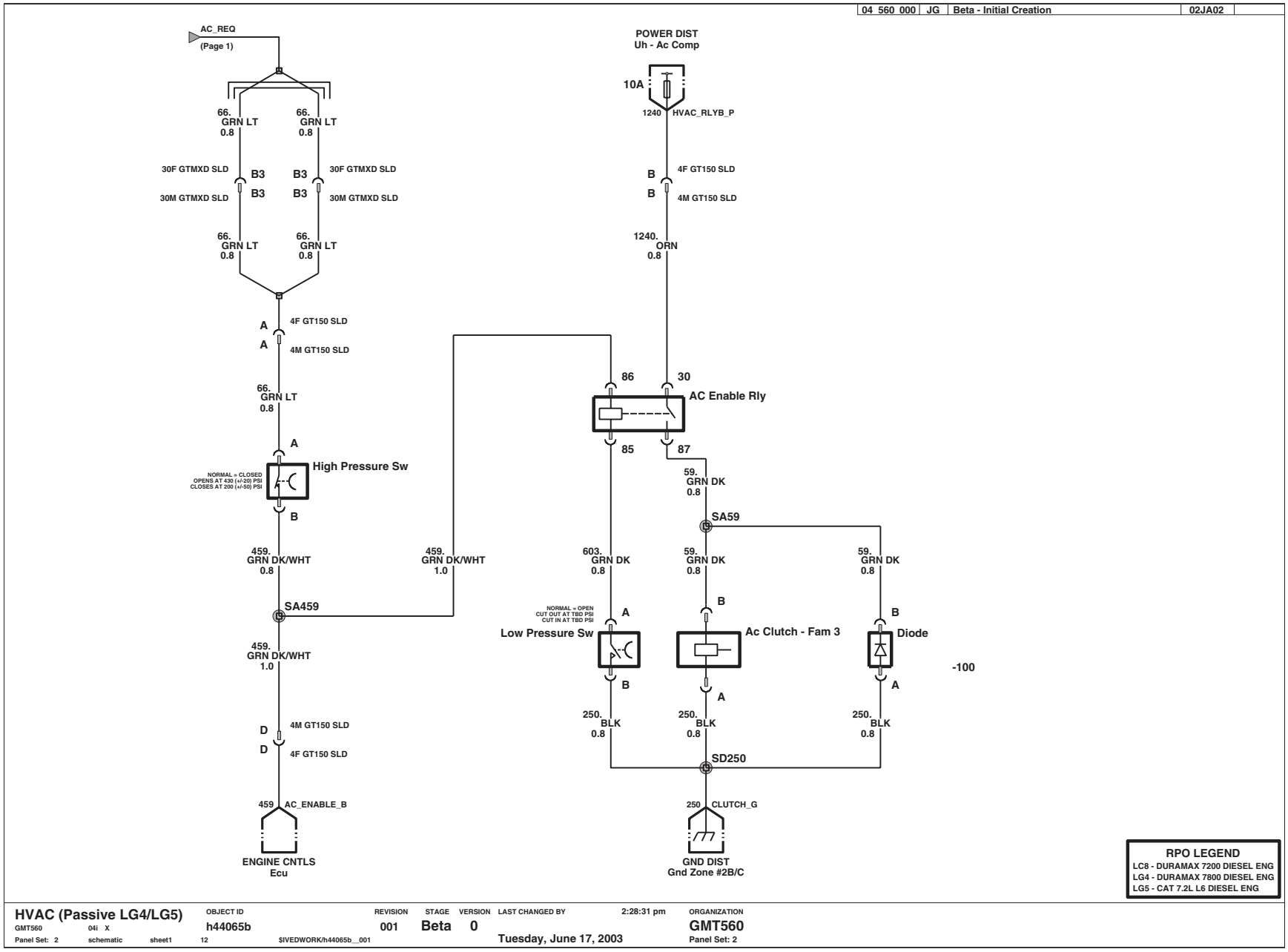


HVAC — Active — (LG4-'04i) 7.8L-Diesel/Duramax — (LG5) 7.2L CAT

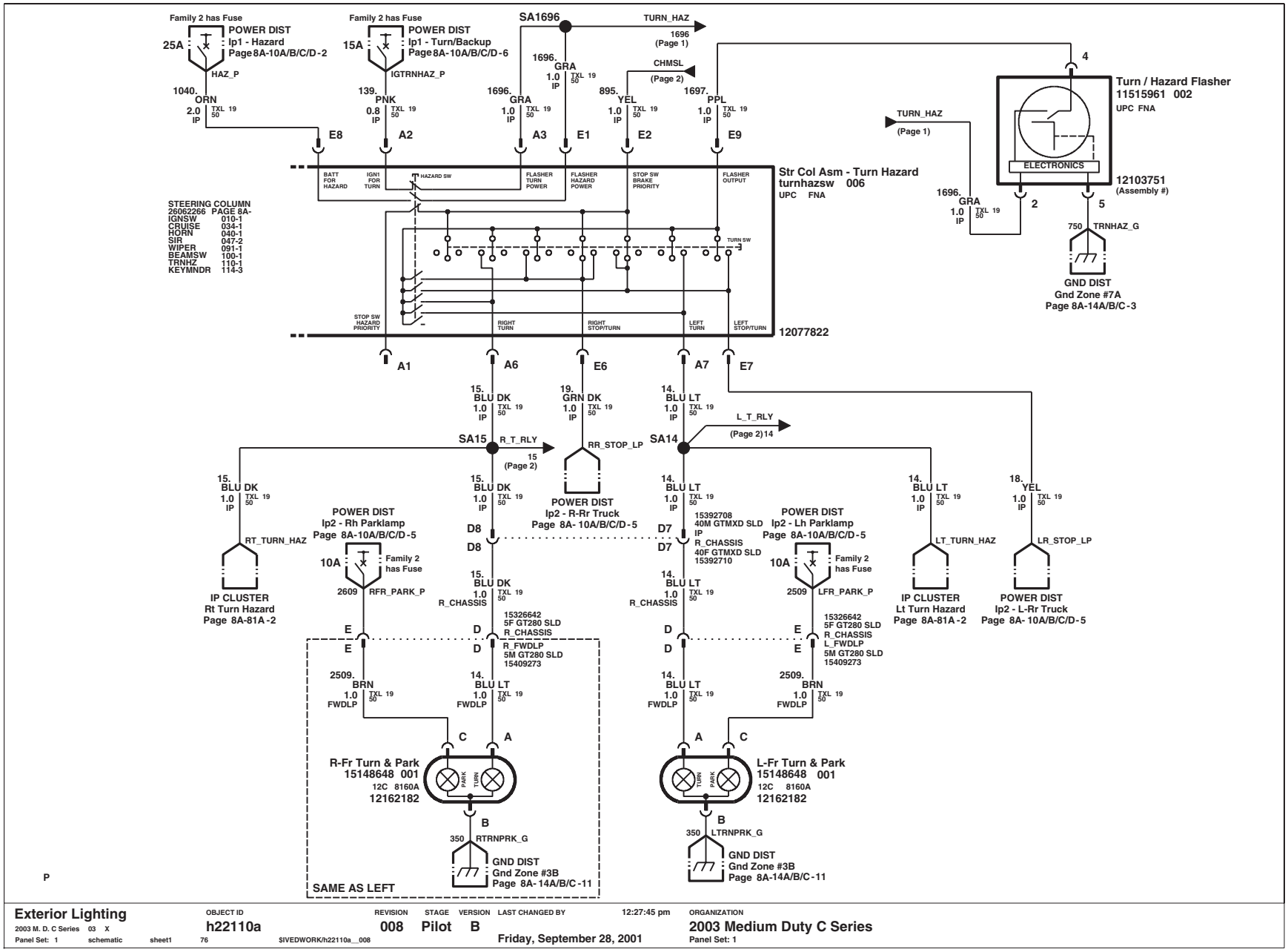


HVAC (Passive LG4/LG5)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
GMT560 04i X	h44065b	001	Beta	0		2:28:31 pm	GMT560
Panel Set: 1 schematic sheet1 12	$IVEDWORK/h44065b__001				Tuesday, June 17, 2003		Panel Set: 1

HVAC — Active — (LG4-'04i) 7.8L-Diesel/Duramax — (LG5) 7.2L CAT

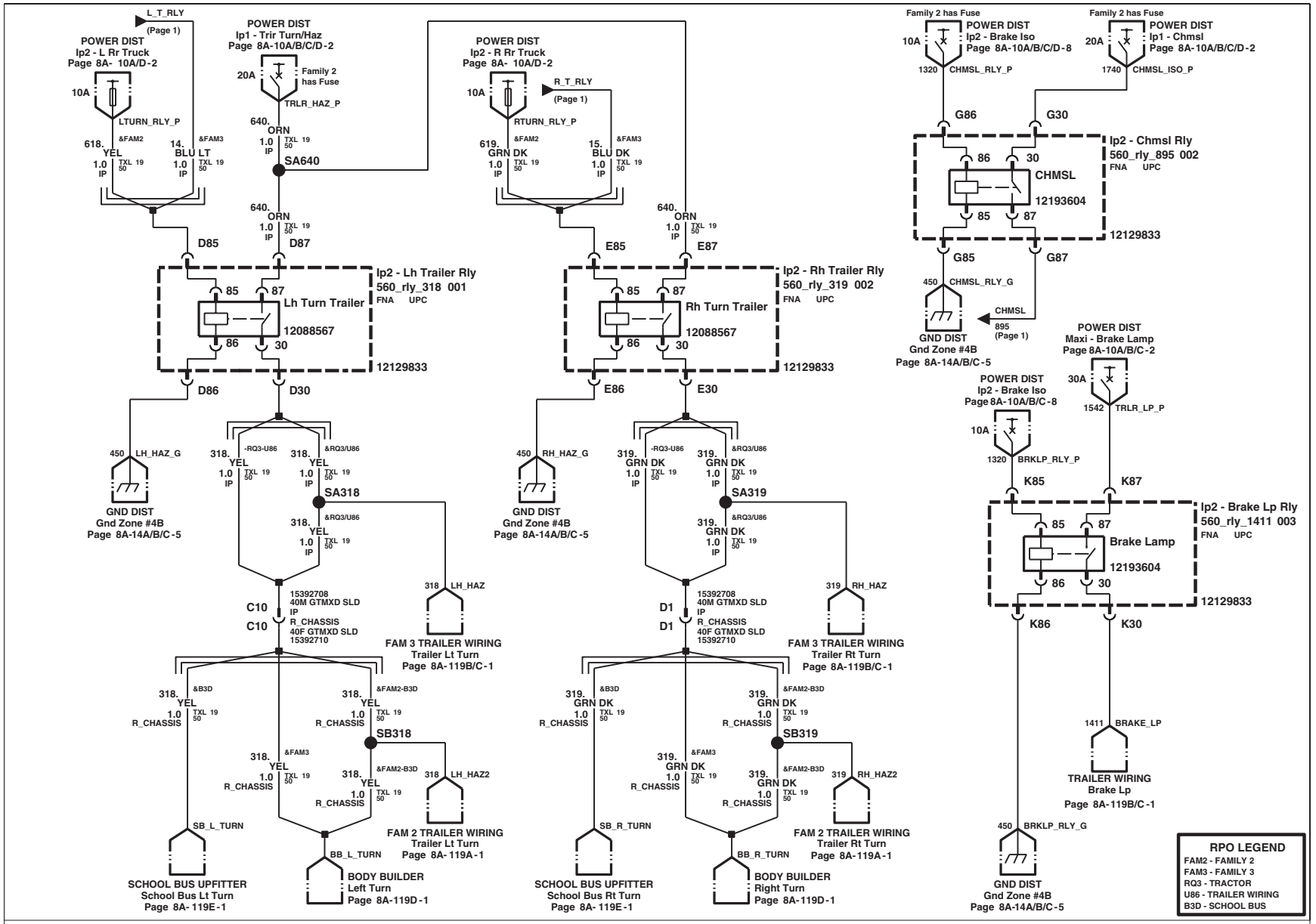


Exterior Lighting

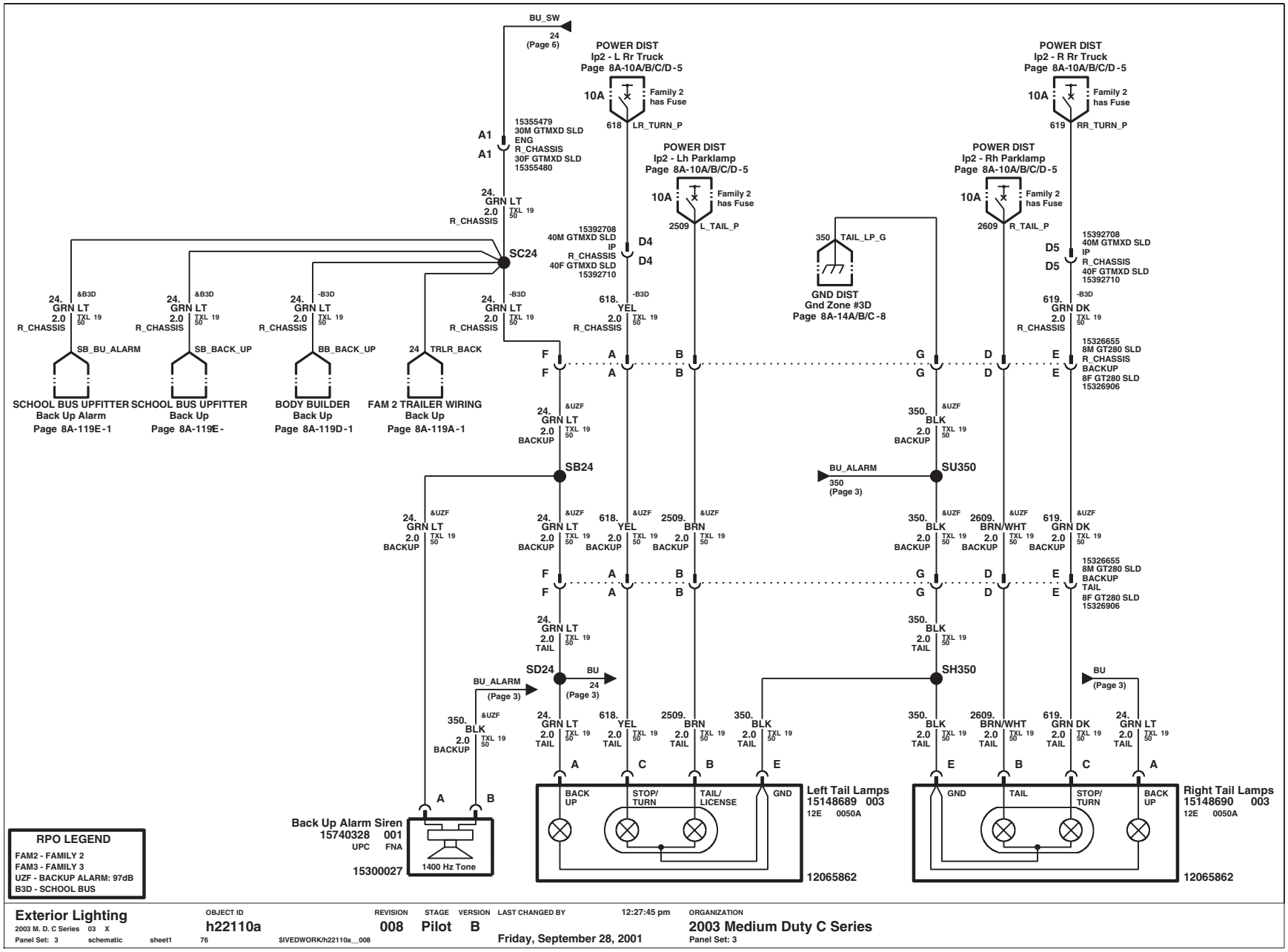


Exterior Lighting	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X	h22110a	008	Pilot	B		12:27:45 pm	2003 Medium Duty C Series
Panel Set: 1 schematic sheet1 76	$IVEDWORK/h22110a__008				Friday, September 28, 2001		Panel Set: 1

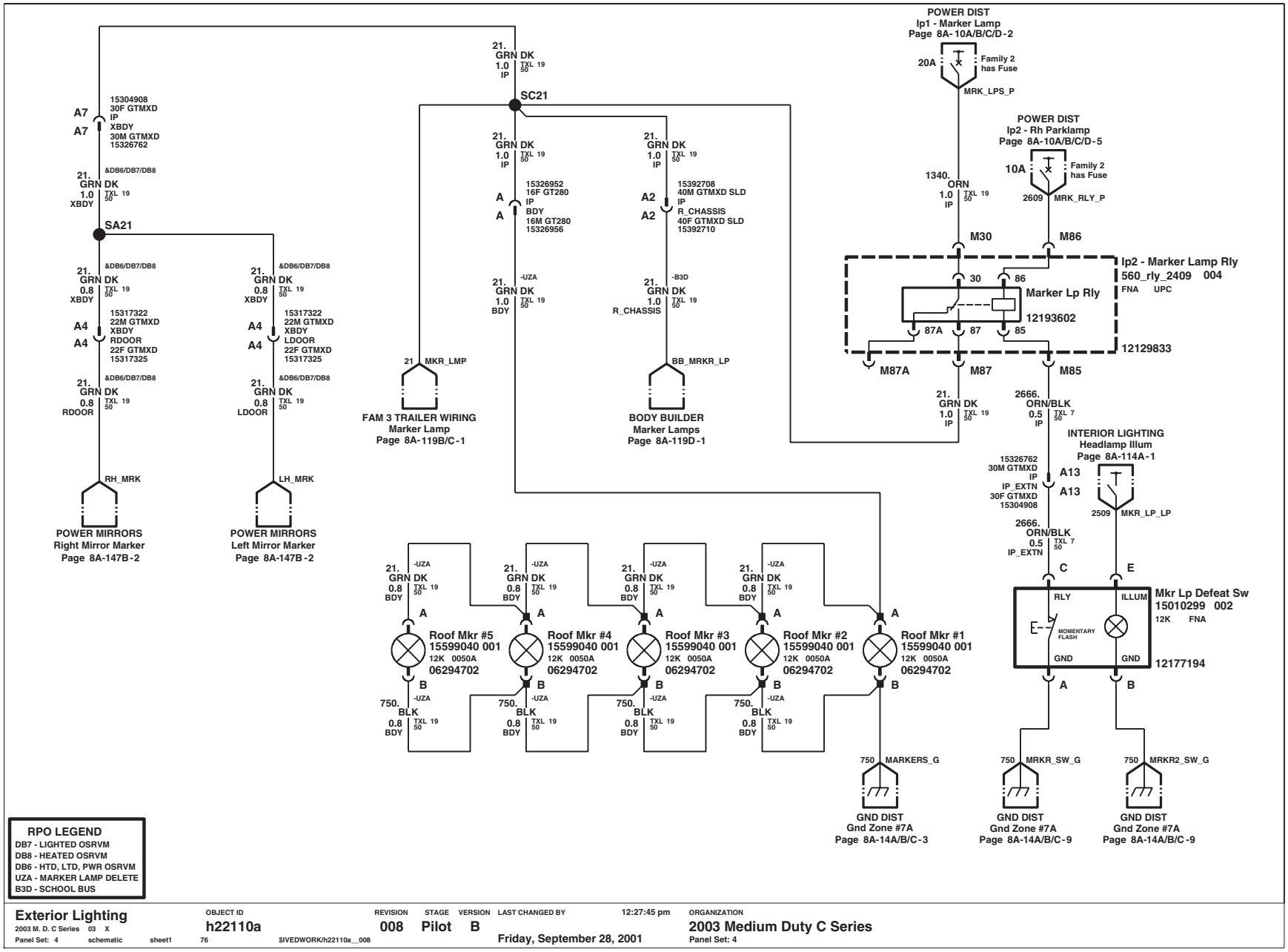
Exterior Lighting



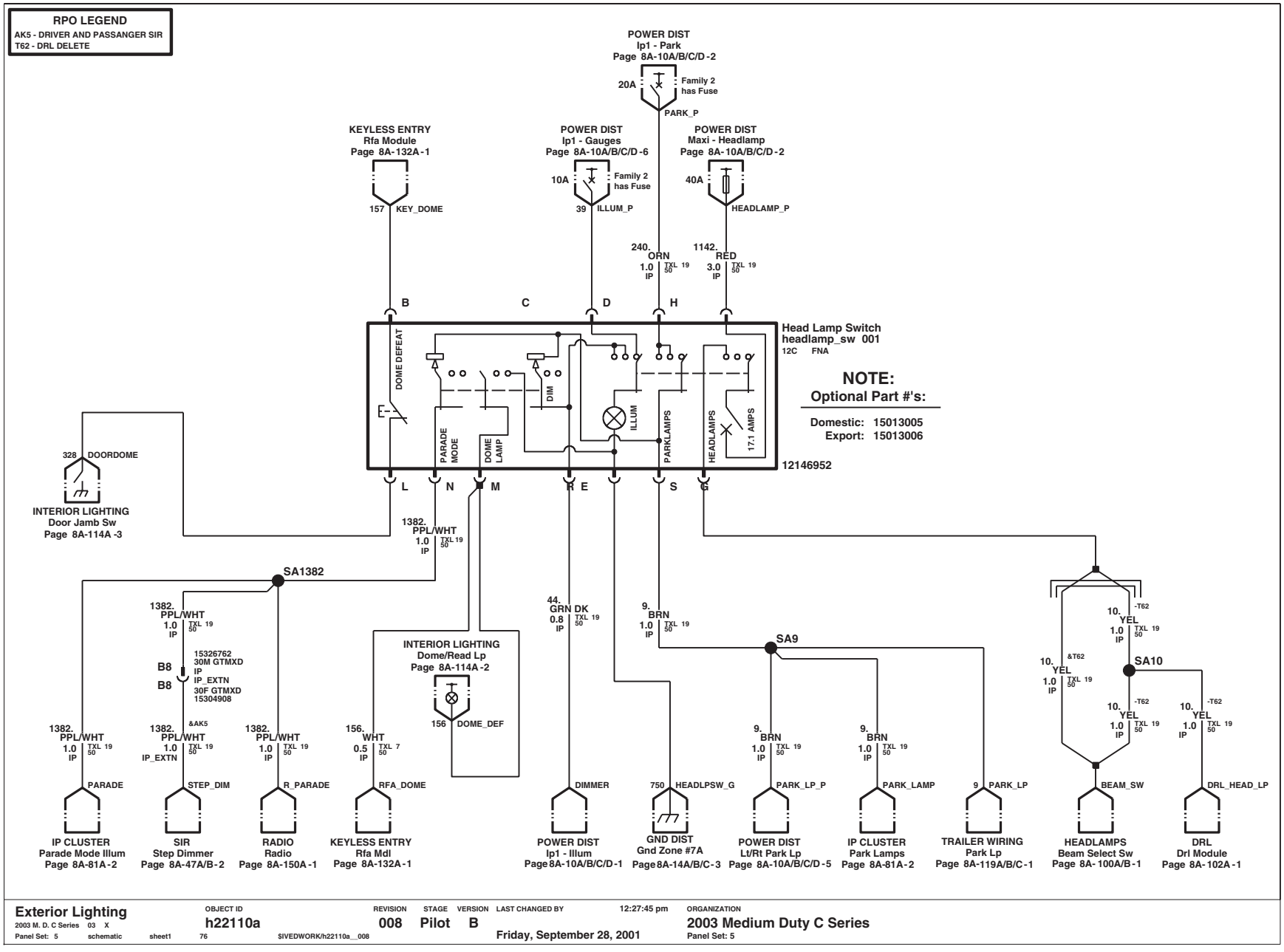
Exterior Lighting



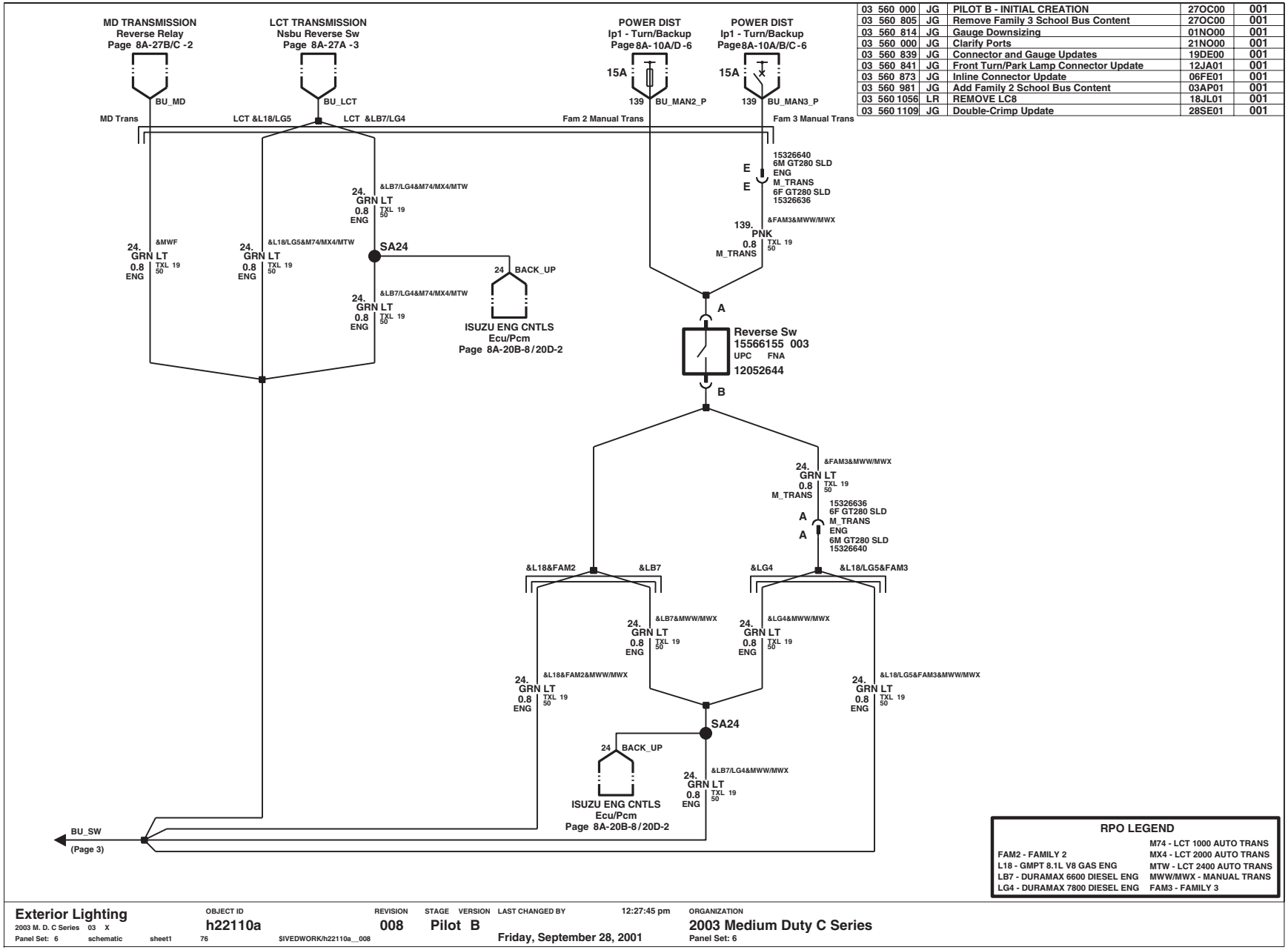
Exterior Lighting



Exterior Lighting



Exterior Lighting



03 560 000	JG	PILOT B - INITIAL CREATION	27OC00	001
03 560 805	JG	Remove Family 3 School Bus Content	27OC00	001
03 560 814	JG	Gauge Downsizing	01NO00	001
03 560 000	JG	Clarify Ports	21NO00	001
03 560 839	JG	Connector and Gauge Updates	19DE00	001
03 560 841	JG	Front Turn/Park Lamp Connector Update	12JA01	001
03 560 873	JG	Inline Connector Update	06FE01	001
03 560 981	JG	Add Family 2 School Bus Content	03AP01	001
03 560 1056	LR	REMOVE LC8	18JL01	001
03 560 1109	JG	Double-Crimp Update	28SE01	001

RPO LEGEND

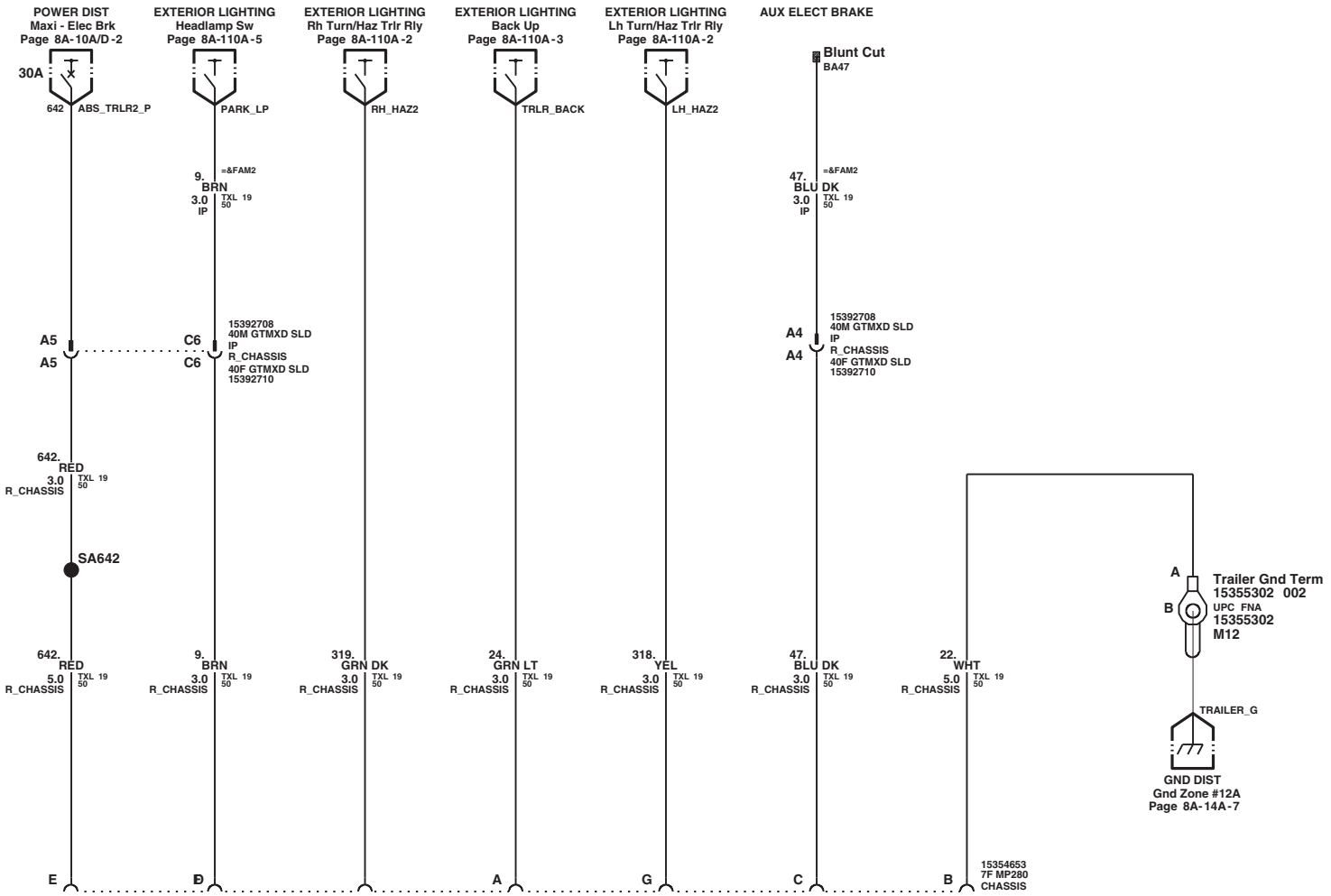
	M74 - LCT 1000 AUTO TRANS
FAM2 - FAMILY 2	MX4 - LCT 2000 AUTO TRANS
L18 - GMPT 8.1L V8 GAS ENG	MTW - LCT 2400 AUTO TRANS
LB7 - DURAMAX 6600 DIESEL ENG	MWW/MWX - MANUAL TRANS
LG4 - DURAMAX 7800 DIESEL ENG	FAM3 - FAMILY 3

Exterior Lighting
2003 M. D. C Series 03 X
Panel Set: 6 schematic sheet1 76

OBJECT ID: h22110a
REVISION: 008
STAGE VERSION: Pilot B
LAST CHANGED BY: $IVEDWORK/h22110a__008
12:27:45 pm Friday, September 28, 2001
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 6

Trailer Wiring Family 2 — Truck Trailer Wiring

03 560 000	JG	PILOT B - INITIAL CREATION	03AP01	001
03 560 981	JG	Add Family 2 School Bus Content	03AP01	001

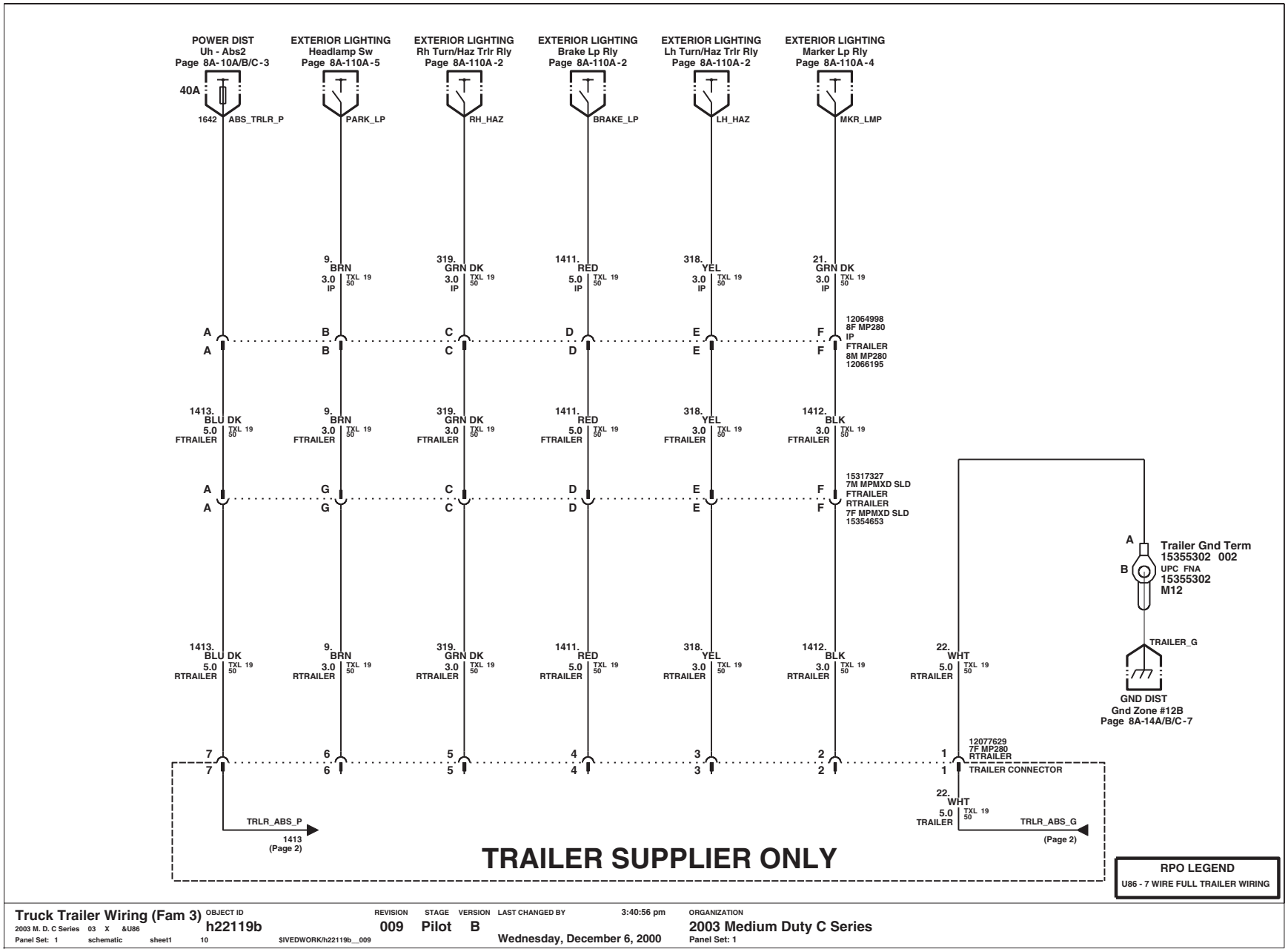


Truck Trailer Wiring (Fam 2) OBJECT ID h22119a | REVISION 008 | STAGE Pilot | VERSION B | LAST CHANGED BY | 9:17:35 am Thursday, October 11, 2001 | ORGANIZATION 2003 Medium Duty C Series

2003 M. D. C Series 03 X &FAM2-B3D Panel Set: 1 schematic sheet1 18 $IVEDWORK/h22119a__008

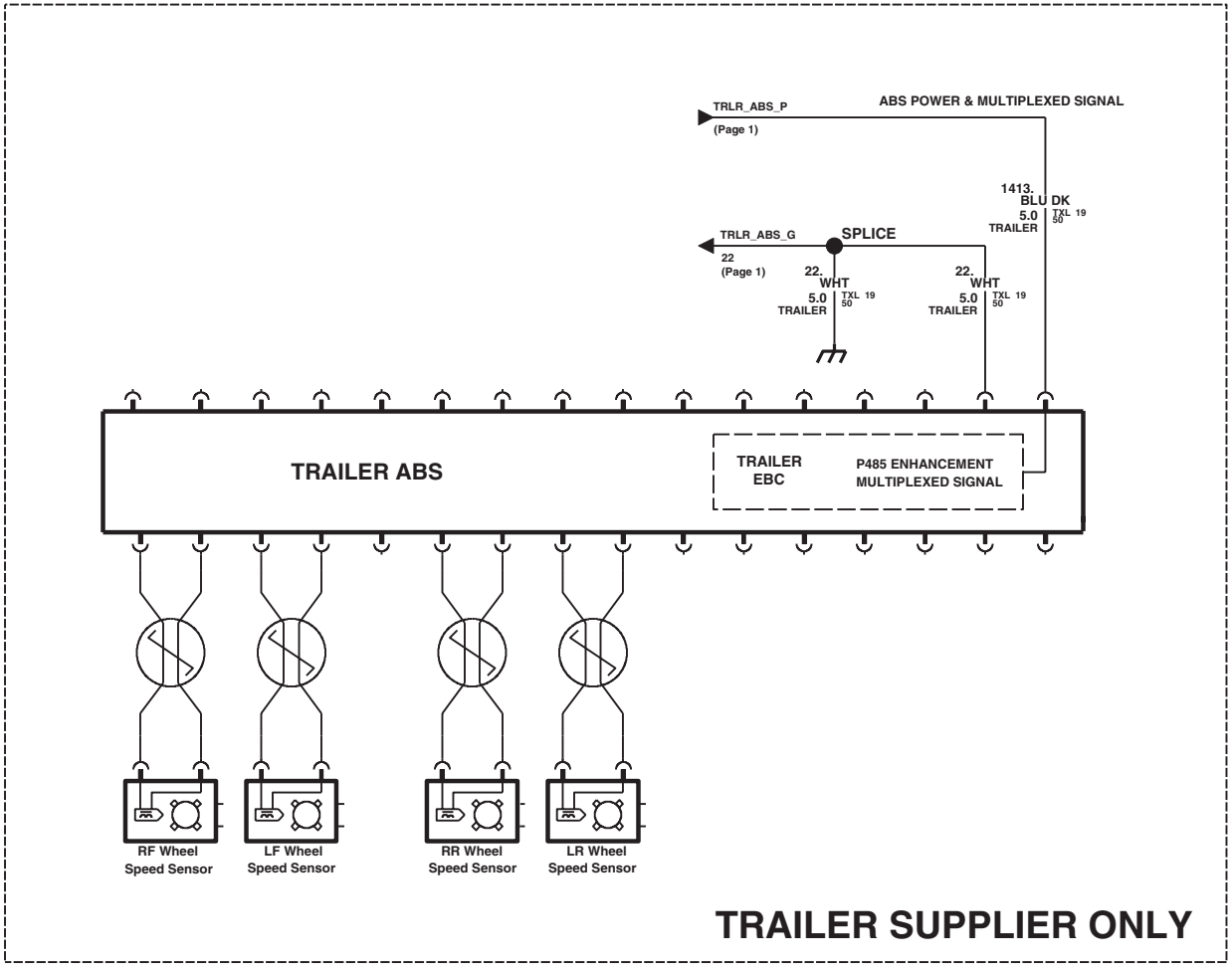
Panel Set: 1

Trailer Wiring Family 3 — Truck Trailer Wiring



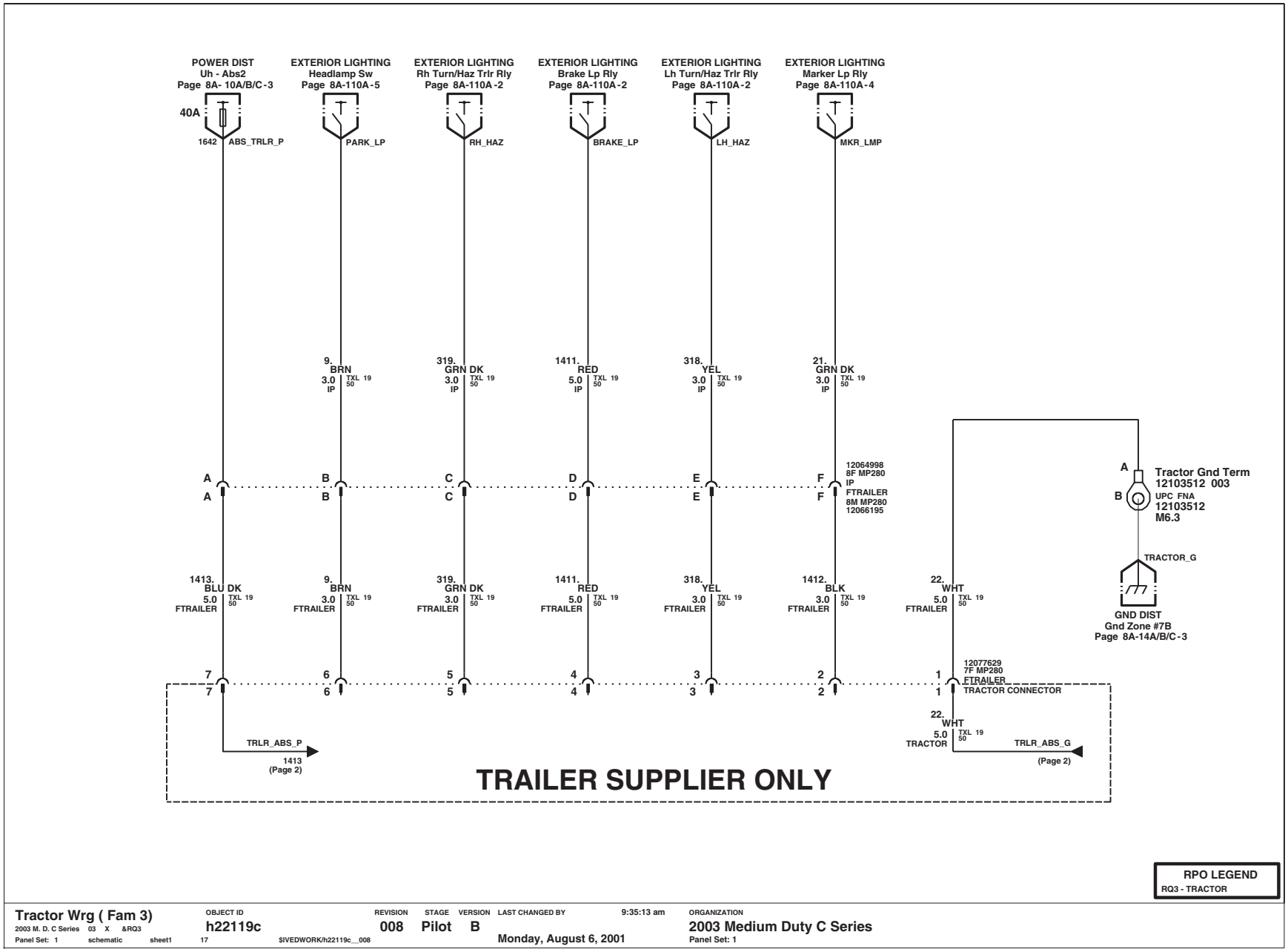
Trailer Wiring Family 3 — Truck Trailer Wiring

03_560_000	JG	PILOT - INITIAL CREATION	09FE00	001



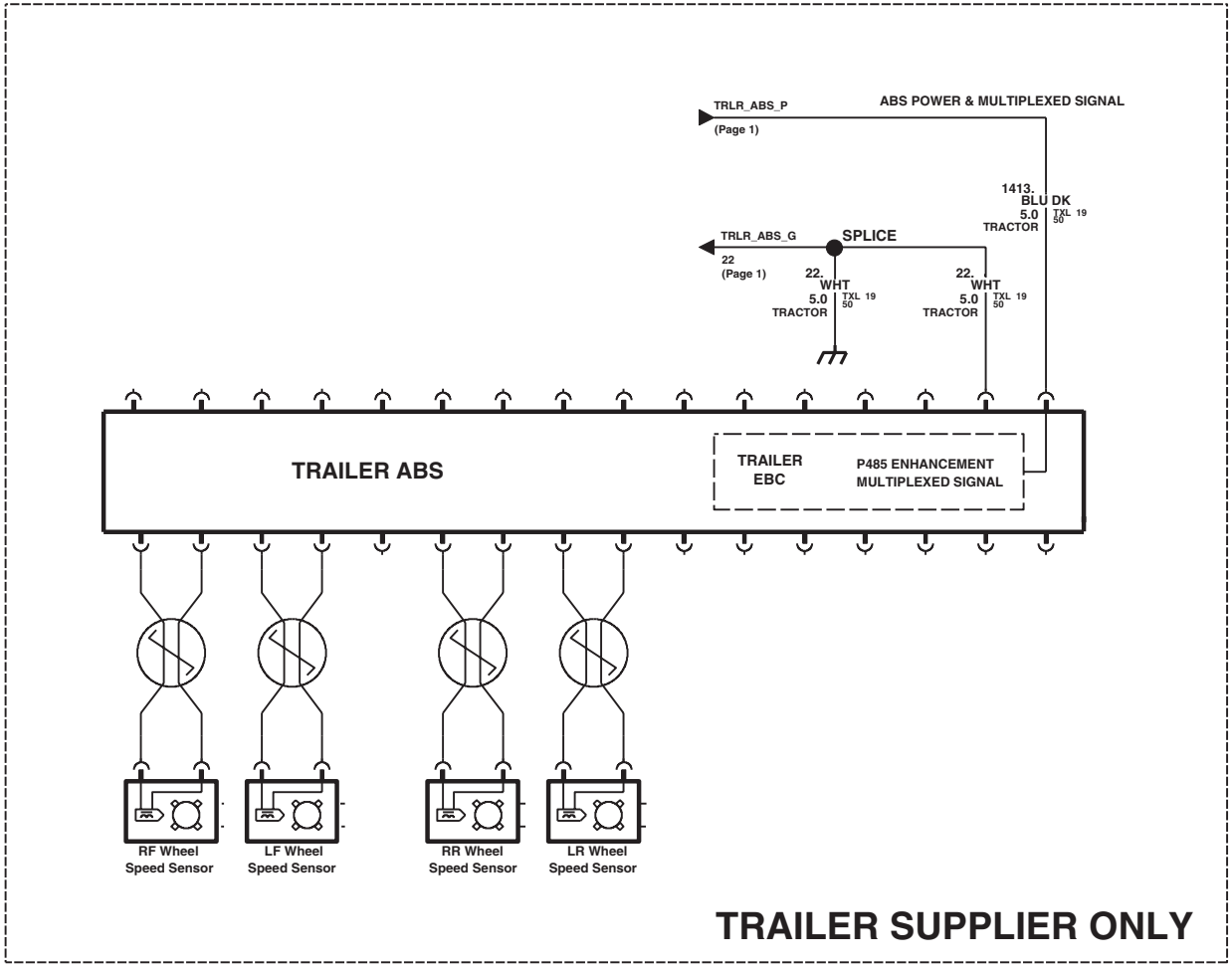
Truck Trailer Wiring (Fam 3)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X &U86	h22119b	009	Pilot	B		3:40:56 pm	2003 Medium Duty C Series
Panel Set: 2 schematic sheet1 10	$IVEDWORK/h22119b__009				Wednesday, December 6, 2000		Panel Set: 2

Trailer Wiring Family 3 — Tractor Wiring



Trailer Wiring Family 3 — Tractor Wiring

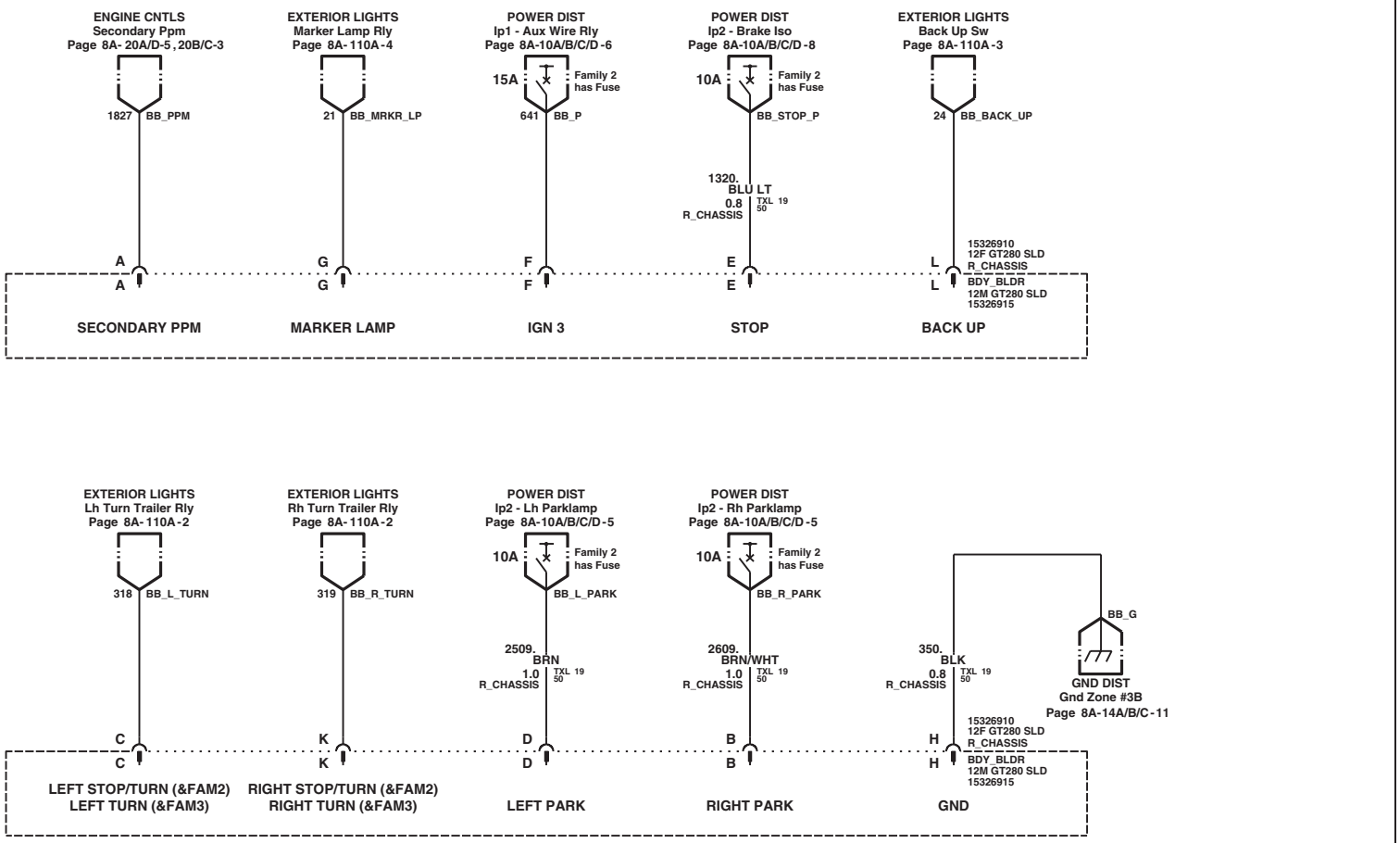
03_560_000	JG	PILOT - INITIAL CREATION	09FE00	001



Tractor Wrg (Fam 3)	OBJECT ID	REVISION	STAGE	VERSION	LAST CHANGED BY		ORGANIZATION
2003 M. D. C Series 03 X &RQ3	h22119c	008	Pilot	B		9:35:13 am	2003 Medium Duty C Series
Panel Set: 2 schematic sheet1 17	$IVEDWORK/h22119c__008				Monday, August 6, 2001		Panel Set: 2

Body Builder Connector

03 560 000	TY	PILOT B - INITIAL CREATION	27OC00	001
03 560 805	JG	REMOVE SCHOOLBUS	27OC00	001
03 560 000	TY	ADDED FAM2 NOTE.	27NO00	001
03 560 981	JG	Family 2 School Bus Update	03AP01	001



Body Builder Connector
2003 M. D. C Series 03 X -B3D
Panel Set: 1 schematic sheet1 52 $IVEDWORK/h22119d__006

OBJECT ID: h22119d
REVISION: 006
STAGE: Pilot
VERSION: B
LAST CHANGED BY: Tuesday, April 3, 2001 4:19:30 pm
ORGANIZATION: 2003 Medium Duty C Series
Panel Set: 1

School Bus Upfitter